

Shipbuilding Ship operation Ship maintenance

# ***MARINE REVIEW***

NEW YORK

CLEVELAND

LONDON

VOL. 51

SEPTEMBER, 1921

No. 9

## **Sell or Sink the Ships—Why Not?**

**Cancerous Growth on American Shipping Brought About by  
Government Interference Demands Quick Surgical Treatment**

**BY JOHN A. PENTON**

**F**OR years loyal Americans fought to obtain what the country finally owned on Armistice Day—a strong fleet of ocean freight carriers. Unless common sense finally is recognized, Americans will be fighting for years to come to get away from what has been wickedly and licentiously forced upon them since Armistice Day—an unwieldy, costly and probably useless mass of ships.

With eyes inflamed by the madness of war, we have seen almost without protest the criminally wasteful and extravagant pouring out of taxpayers' funds since the war ended to carry out what was purely a war project. We have "balanced the fleet" by unbalancing what merchant marine we had. For the last 32 months we have been drifting in a fog. Just one way remains to get back on our course—sell or sink the ships.

Before the war, marine thinking Americans tried desperately to win a few hundred thousands of dollars of support from the government as a direct subsidy to American shipping—a small penalty on the government for its insistence on keeping prohibitive laws on the books. But the thought of a subsidy was abhorrent.

Then the war tossed the whole world into the air and in trying to patch it together, the same lawmakers voted close to three and one-half billions of dollars—and have watched another half billion come in and turn around and go out—for shipping.

Calls for deficiency appropriations of \$125,000,000 for the next six months are important now to these

lawmakers only because the sum is less than they expected.

A few hundred thousands spent annually in the nine years between the defeat of the merchant marine bill in 1907 and our entrance into the war would have saved these four billions. And we should now have a real merchant marine with a trained personnel of private owners instead of a mass of ships which we have been unable to operate or to sell.

No honest effort was made to sell the ships when they could have been moved quickly. The one method now is to tow out the wooden ships and sink them; next offer 25 of the lower grade steel ships at auction—any bid accepted—and if no bids are made, sink these. Next week or month offer another block of ships. Tell the story to the whole world, regular auctions at regular intervals, open to every one—Americans preferred, but everyone, European, African, Asiatic, privileged to bid and buy. England has thrown down the bars on ship sales and Germany is buying from her. A few sinkings, a few sales at bargain prices, a few evidences of sincerity in getting rid of the ships and the fleet will begin to sell. Don't forget that every sale means one less leakage of public funds.

It was a crime not to have cancelled all government-subsidized ship construction as soon as the armistice was signed.

We should have started the next morning to fire the huge force built up at federal expense to win

the war all along the entire shipbuilding route.

We should have started selling the ships immediately when the price was good instead of haggling about the world market price. •

Every day since we should have been selling. Today we should be selling and if the ships can't be sold or given away, we should sink them and end the terrific financial strain of trying to operate or care for the idle vessels.

When the armistice came, we had completed 553 ships. Effective cancellation at that time would have ended the program with not more than 750 ships. Instead we went merrily along with our "balancing" plans, until we have completed 1539 ships over and above the 750 actually constructed in the war period. And with 1539 excess ships built under a criminal policy of winning a war already ended, we now have 1020 vessels laid up in idleness because of no market, and no ability to find a market.

What rebuttal can be found to the plan to sell or sink?

The wooden boats cost \$135,000 a month to keep in idleness.

With present losses put by Chairman Lasker at \$300,000,000, a year he needs \$125,000,000 more to keep the shipping board alive till the end of 1921.

And he calls this estimate a "competent incompetent guess."

During the past year, the board spent \$680,000,000 and the new board can do little during the next year to cut down that colossal expenditure unless it wipes the slate clean of the main cost—the ships.

Operations show a net loss according to shipping board bookkeeping standards of \$10,000,000 a month; repairs add in another \$2,000,000 monthly loss.

When a government touches a private industry, the contact is leprous. The only cure is to remove the cause of infection before the whole system is poisoned.

For the salvation of American shipping, now and in the future—for the protection of all American industries—for the sake of all American citizens, the government should get out of all business.

Trying to patch up the present crazy quilt will not do it.

To help the government save many millions of dollars now being lost by deterioration and upkeep every month—

To help reduce our national budget and the taxpayers' burden—

SELL OR SINK THE SHIPS.

## Lasker Proves Board Control Ruinous

THIS has been a very difficult thing to ascertain. The books are in deplorable condition. In any commercial institution they would not be called books at all. They were started in the stress of war and continued in the stress of incompetency until Mr. Tweedale and the others are now trying to straighten them out. Any of our great corporations would have been in receivers' hands long ago had its books been kept as those of this organization have been and are kept and the operations of the fleet necessarily must be just as incompetent as the books are because it is impossible to operate any business if there isn't a figure on which remote reliance can be placed. In the presence of the men who have had charge of the books for 15 months, I want to say it is inconceivable that an institution like this

could be in existence and be turned over to men to administer in the shape it is. Had the books been kept with a view to cheating and deceiving congress and the country, they could not have been kept in much different shape than they have been and I measure the words I am using. It has almost worn me out physically and mentally to get anything from the books that could be regarded as complete. •

Last year, nominally out of the public treasury, approximately \$100,000,000, actually authorized by con-

gress, was expended on the shipping board. This sum represented the total of appropriations. One might deduce from this that only a hundred million was used by the board during last year.

When I showed to the President the actual figures, he was shocked and dismayed that such a condition could exist. The board used in the last fiscal year approximately \$380,000,000. Besides the \$100,000,000 appropriated by congress, and \$80,000,000 on hand at the beginning of the fiscal year, it sold assets for \$200,000,000 all of which

money went back into the enterprise. Then in addition it received from operation of vessels, etc., \$300,000,000, which was also spent, thus making a total expenditure by the shipping board of \$680,000,000. This \$300,000,000 received from operations when deducted from the \$680,000,-

### How the \$680,000,000 Was Spent

#### RECEIPTS

1. Appropriated by congress.....	\$100,000,000
2. Treasury credit on July 1, 1920.....	80,000,000
3. Received from sale of ships and other capital assets.....	200,000,000
Sub total .....	\$380,000,000
4. Received from operation of ships.....	\$300,000,000
Total .....	\$680,000,000

#### EXPENDITURES

Operating and general overhead expenses.....	\$409,000,000
New ship construction .....	160,000,000
Construction of dry docks, marine railroads and vessel equipment.....	6,000,000
Miscellaneous inventory supplies (fuel, etc.).....	18,000,000
Advances to foreign branches and advances to receivers.....	15,000,000
Miscellaneous disbursements .....	72,000,000
Total .....	\$680,000,000

000 received from all sources shows a net expenditure of \$380,000,000, although the public records show \$100,000,000 to be all that had been appropriated by congress for the year.

This is an astounding case of absolute deception of the country and congress. I know and want to explain that Admiral Benson and Mr. Tweedale had not the remotest thing to do with such gross misrepresentation. They were acting in accordance with the system under which the books had been kept from the hour the institution started and they were so busy trying to straighten out the mix-up in settlements and operations that they never had the time to try to systematize the records.

The only reason this situation has become apparent now is because coming in as a new administrator I desired to find out for my own guidance what the loss had been. This necessitated calling in outside auditors before the facts could be ascertained. I do not guarantee the figures now; they are the best we could secure from the books and we are assured that they will prove fairly reliable.

It will be a shock to congress, as it was to the President, to hear that the net expenditures of this enterprise, paid out of the public funds last year was \$380,000,000. To illustrate the bad condition the books are in, I will say that last year the gross operating disbursements were \$410,000,000. That represents the expense of the operation of the boats alone. Of that amount, there is yet no exact accounting for \$310,000,000. This item represents money disbursed for the board by the operators of government owned boats who have as yet failed to make a full accounting. It is only fair to say that the operators of a boat are always on the average a few months behind in reporting the accounts, because, if a boat leaves today on a four months' voyage, money is being paid out for her that can not be accounted for until she shall have finished her trip; but obviously, for 75 per cent of the year's operations to be unaccounted for demonstrates a complete breakdown and shows further that the new shipping board has inherited a collapse that will take it every effort and tremendous patience to resuscitate.

As I look into the details, I find them worse than my worst expectations. Approximately \$200,000,000 represents absolute loss in operations of the fleet. There was expended \$160,-

000,000 on construction of ships, divided as follows: \$149,000,000 on steel ships and the rest on miscellaneous ships, including an item of \$3,000,000 for wood, composite, and concrete ships. What these newly acquired assets are worth is highly questionable.

The plans for the steamer AMERICAN LEGION were redrawn seven times

worth is probably half what she cost. So you can see assets such as that are pretty sick assets.

But after all there is a fleet. It is the largest fleet many times over that the world has ever known. So our task is to make what was a liability into an asset, for of course the fleet must be operated. And if we can solve the problem of how successfully to operate these ships it will be worth all the money the war cost to put the American merchant marine back on the map. If it had not been for the war we would not have this merchant marine, so we must turn our backs on the sad past and look constructively and patiently to the future.

I must appear before congress shortly to tell them it is possible the shipping board will require up to \$300,000,000 for the present fiscal year. I fear this will throw a lot of sand in the gear box of tax revision. The books of the board are so absolutely incomplete and incompetent that it is impossible to be sure whether that \$300,000,000 represents all we may need; we may require more but it is the most intelligent wild guess we can make.

The President instructed me that during his administration the public is to have the facts—and all the facts—and that when we show losses on operations of the shipping board, they shall be the actual losses. Anything realized from the sale of assets from now on must be covered into the public treasury, and not expended as in the past. The President wants the country to get—not as in the past, a picture that shows what did not happen—but even though it might show that we ourselves are incompetent, to publish all we really lose.

Now it is necessary to ask congress for \$300,000,000 to carry us through the coming year, though we will try the first six months to get along on \$100,000,000 to \$125,000,000. We will not hide our losses. When I say we may need up to \$300,000,000 for the coming year, it is with the hope that from that sum we will be able to pay not only the losses of operations, but also to settle finally a part of the claims and the law suits pending against the shipping board. These latter amount to more than \$300,000,000 themselves, but we anticipate settling them for 50 cents on the \$1.00, because many of them are padded.

Congress already has appropriated \$25,000,000 to finish the construction of ships. It is estimated operations will lose \$150,000,000. The reason the

### No Questions Asked as Bills Are Paid

*BILLS had been passed for payment practically without checking," one commissioner told the writer. "Take this top voucher now on my desk. It carries an item of 23 days to load a steamer at a dock charge of \$250 per day. I withheld approval and the company explained that cargo had been slow in arriving. But as the operator of our ships, this company was obligated to obtain the cargo as quickly as possible. In addition, the same company owned the dock to which the \$250 a day charge would have been paid. When I asked whether such a course was fair and honorable, the company representative shrugged his shoulders and said that they had always been making these kinds of charges.*

*"The same bill indicated this company wanted the government to pay more for handling freight than for loading, although it is obviously more difficult and expensive properly to sort, load and distribute cargo to secure a correctly stowed ship, than it is to attach a sling to some goods in the hold and swing it to the dock.*

*"Men unfamiliar with the a-b-c of shipping had apparently been allowed to pass on items aggregating millions of dollars with the inevitable result manifestly extravagant items went through to the pay window without protest."*

and it is easy to see how that would run up the cost. First the AMERICAN LEGION was designed as an army transport, then as a navy transport, then as a hospital boat, then as a cattle boat, and after spending money on all these blueprints it was decided to transform her into a passenger ship—and she is a very beautiful and fine passenger ship. But she cost between six and seven million dollars and that was before she sailed her first mile. As a matter of fact, her real

loss from operations will be so great, in spite of the efficiencies and economies we will introduce, is that the first six months of the fiscal year just closed were very good commercially. The last six months were poor. Most people are looking forward during the 12 months we have just entered upon to dull times; so that we may expect hard sledding during that period. Moreover, it will be several months until the changes of policies we hope to put into effect begin to reflect or even to become active, and we are compelled to go on in the very incompetent way the boats are being operated while we are moving to introduce business methods and reforms.

The boats are being operated today in the following shocking manner: an operating company is allocated a number of boats. They are allowed a commission of .5 per cent flat on gross revenue. The boat can lose all kinds of money—the taxpayers pay the losses, but the operator makes money just the same, because he gets his 5 per cent commission.

#### U. S. Loses Either Way

I have actually heard of a boat turning back in midsea to take a cargo on which the operator made \$400 and the government lost \$8000 and this boat was half way across the China sea when they turned her back to get that cargo at Manila. It is nobody's fault that the present system prevails. These boats were built when American operators had no experience and a system had to be developed to get them moving. As long as times were fine the system did not work out so badly, but anybody can see that a system whereby the operator has nothing at stake, whereby the government loses and he wins, is a system that makes for inefficiency.

We must grin and bear that system for some months to come because to establish such a charter system as will be developed by the new vice presidents of the present board is a matter almost as difficult, in a minor way, as it was to negotiate the peace treaty at Versailles. It is a highly technical matter which must be approached with the greatest care.

To show the condition of incompetence that exists, the present basis of doing business went into effect in March, 1920, and out of 9000 voyages made, only 3000 were accounted for on July 18, 1921.

I will say this as to the wooden ships: I first announced that the wood-

en ships had cost \$240,000,000. This is incorrect. I failed to include the cost of uncompleted ships of this type.

### Seek Quickest Way To Get Government Out

*THE President, the Jones act and the shipping board are all in accord," says Chairman Lasker, "that the shipping board must function so as to turn its boats over, as soon as good business judgment dictates, to private owners. Unless shipping board boats are very soon operated along the most correct business lines, we will not have any operators or owners left in America who can buy these boats. The operators and owners unanimously feel that way; and to get shipping board operations on an efficient basis is the quickest and shortest step to creating a situation whereby private people can buy these boats.*

*"It is for that reason that the shipowners and operators have unanimously agreed to something which I think is unique in government relations with private industry,—that if they have any key men whom we want and who are vital to them, but who are vital to us, we are to get these key men.*

*"New routes will be one of the assets we will try to sell. Another phase is this: Supposing there is a route and two ships are on it, one privately owned and one government owned, and it will only stand for one ship. It is our idea that we will take out of service the government-owned boat and leave in the privately owned boat, because if we bust the private company, whom will we have left to buy the boats when business gets good enough to have two lines?"*

*"Shippers have lost confidence in the government-owned ships. They have not sailed on time, they have not arrived on time, and the goods have not always been in good condition when they have arrived. By the time they get the answer as to whether we will charter them a ship, that business is often loaded on foreign bottoms. The coming of Smull and Love and Frey will give a wholly different atmosphere to American shippers."*

The total loss on wooden ships, including those uncompleted, is \$313,000,000. I was \$73,000,000 shy. These vessels are practically worthless. We

are making an inventory of the assets as fast as we can and when that inventory is completed we will know what the wooden fleet is worth and of course we will know the value then of all other vessels and properties as well.

Besides the liabilities I have spoken of there are unknown liabilities because the books have been kept so badly. For instance, there is shown miscellaneous disbursements of \$307,000,000 in operations. That means \$307,000,000 advanced to operators. They may come to us and show we owe them much more than that amount. The whole system of operations was basically so improper that it will take a year or more until we can determine the extent of the unknown liabilities. Two hundred auditors today are working in the offices of operators. Think of the expense—waste and unnecessary expense on us—two hundred auditors trying to dig into these books to secure information on the six thousand uncompleted voyages.

#### Wants Permission Revoked

Until this year, the shipping board was permitted to sell ships and surplus materials and to use the cash received for expense purposes. This procedure is now forbidden. In order to keep the board running, congress authorized it to use \$55,000,000 to be derived from the sale of ships and materials. There is no chance of our getting any such sum from those sources. This is a basically wrong thing to do anyway. Therefore, I am going to ask congress to withdraw that permission and require us to cover into the treasury all moneys derived from sales. I do not want to be at the head of a business that is run in any such fashion. If department heads do not have to account for money they use, it is easy enough for them to fool me and fool themselves; it makes for criminal waste and extravagance just as undoubtedly it has in the past.

The President has inherited in the shipping board the most difficult business problem ever given to a President to work out. Every condition surrounding it was sick. Beginning with world trade conditions, which are the worst ever known, and coming down to the ships themselves, sickness prevails. Such ships as they had ways to build were laid down when the war started. Many of them do not fit into the trade and are expensive to operate. The carrying business of the world is sick, and the morale of



the men on the boats, because of all of these conditions, is likewise pretty sick.

No matter how quickly and efficiently the new board and its officers function, the flood tide of loss from the policies of the past can not be stopped for months to come, and the deficit for the coming year will reflect the sad history of the past rather than the reorganized effort of policies inaugurated by the new board.

However, the new shipping board is not disheartened. Startling as these figures I have given are, they prove to us that with patience something can be done, and out of this wreck, Phoenix like from its ashes, a real American merchant marine can arise that will be worth all the penalty we have suffered, and when prosperity comes to the world our marine will be the greatest insurance that America will get its full share.

## Shipowners Approve Plan for Operating Control

Private operators of American steamships have been enthusiastic in praising the judgment displayed by the shipping board in naming from their ranks the three men charged with responsibility for operating the federal fleet. These three men, who serve as vice presidents of the Emergency Fleet corporation in charge of operations, are William J. Love Jr. Barstow Smull and A. J. Frey, three practical operating men who have had wide experiences in managing private fleets.

H. H. Raymond, veteran operator of American tonnage and president of the American Steamship Owners' association, as well as other owners and operators of both large and small fleets, regard the appointments as significant of better days ahead for American shipping and American shippers.

"The announcement of their appoint-

ment is the best shipping news that has come from Washington for the last 50 years," says Winthrop L. Marvin, general manager of the American Steamship Owners' association. "In character and experience, the new committee on operations is composed of men in the very first rank.

"Mr. Smull and Mr. Love are well known and honored in their profession by the whole maritime community of the Atlantic coast. Mr. Frey is not so well known in the East, but he was connected with the Pacific Mail Steamship Co. management when that concern was previously operating great ships in the Oriental trade across the Pacific.

"These selections by President Harding and Chairman Lasker of thorough, practical men like Mr. Smull and Mr. Love for the great responsibility of operating what is incomparably the largest steamship fleet in the world are tremendously encouraging."

# Benson Claims Losses Are \$22,000,000

THE old shipping board whose financial affairs are so vigorously assailed by Chairman Lasker, was headed by Admiral W. S. Benson, now a commissioner on the new board. The admiral, together with a great many associated with the old board as well as several of the new commissioners, do not approve the new financial analysis.

In the judgment of these men, the actual losses of the shipping board instead of running up to \$300,000,000, are only \$22,000,000. The completeness of the financial breakdown in the shipping branch of the government is amply testified by the fact that either figure is susceptible of proof. Mr. Lasker revealed to the appropriations committee of the house of representatives the detailed figures on which his estimate of losses was based. These figures were the evidence offered in justification of the request for \$125,000,000 to run the board through 1921.

The Benson estimate is backed by various statements of expenditures prepared at different times during the past year. They are more clearly understood from a study of the special report prepared by the old board just before its retirement. This report was the result of a senate resolution calling for exact rather than vague information relative to the financial conduct of the board and was made public only recently. This resolution called for:

1. The total amount of moneys appropriated for, and otherwise provided for, the shipping board and the Emergency Fleet corporation, from Sept. 7,

## Wasted Money Goes Into Germany

AMERICAN taxpayers, plundered as they have been to keep alive the criminally wasteful government fleet, in some cases have been robbed even of the slightly compensating thought that the misspent funds were transferred to the pockets of other Americans. One instance given shows that the taxpayers were paying for the privilege of aiding German manufacturers.

The shipping board operates steamers in the route between Hamburg, Germany, and the River Plate, South America. These ships carry enameled ware at a lower rate from this German port to Argentina than other board vessels. Manufacturers of this ware were not only penalized to aid their German competitors but the taxpayers' money went to make up the deficit accruing from this coddling of the Germans.

1916 to Nov. 30, 1920. In reply, figures were offered covering the period from the organization of the board up to Feb. 28, 1921.

The Benson administration presented the following tables showing total receipts, from congressional appropriations and from the President's special

funds, of \$3,285,393,545.98. These receipts are:

Moneys appropriated for:	
United States Shipping Board—	
Permanent fund (act of Sept. 7, 1916), to purchase capital stock of Emergency corporation .....	\$50,000,000.00
Salaries and expenses, 1917 (act of Sept. 7, 1916)...	100,000.00
Salaries and expenses, 1918 (act of June 12, 1917)...	342,500.00
Investigation of foreign discrimination against vessels and shippers of the United States (act of June 12, 1917) .....	175,000.00
Increase of compensation (act of June 12, 1917)....	4,633.71
Salaries and expenses, 1919 (act of July 1, 1918).....	842,500.00
Salaries and expenses, 1920 (act of July 19, 1919).....	772,986.00
Salaries and expenses, 1921 (act of June 5, 1920)....	442,500.00

Total moneys appropriated for United States Shipping Board .....

United States Shipping Board Emergency Fleet Corp. .... \$52,680,119.71

Emergency shipping fund—

Act of June 15, 1917.... \$ 405,000,000.00

Act of Oct. 6, 1917.... 635,000,000.00

Act of July 1, 1918.... 1,806,701,000.00

Act of July 11, 1919.... 500,000.00

Act of July 19, 1919.... 356,000,000.00

Total moneys appropriated for United States Shipping Board Emergency Fleet Corp. .... \$3,203,201,000.00

Total moneys appropriated for... \$3,255,881,119.71

Moneys otherwise provided for:

Allotments by President of the United States to United States Shipping Board—

National security and defense fund, 1918 (act of Apr. 17, 1917)..... \$ 27,011,682.84

National security and defense fund, 1919 (act of July 1, 1918)..... 2,500,743.43

Total moneys otherwise provided for .....

29,512,426.27

Total moneys appropriated for and otherwise provided for... \$3,285,393,545.98

2. The gross profits or losses, as the case may be, for the same period.

In answering this question, the old

## Where the Money Came From

United States Shipping Board and United States Shipping Board Emergency Fleet Corporation

Statement of gross and net proceeds of receipts from appropriations, allotments, and other sources from inception to Feb. 28, 1921.

Item No.

1. Gross receipts:

(a) From appropriations—

(1) Salaries and expenses.....	\$2,675,486.00
(2) Increase of compensation.....	4,633.71
(3) Emergency shipping fund.....	3,203,201,000.00
(4) Sale of capital stock (permanent fund)....	50,000,000.00

(5) Total receipts from appropriations..... \$3,255,881,119.71

(b) From allotments by President of United States—

(1) National security and defense funds..... 29,512,426.27

(c) From other sources—

(1) From operations of vessels—

(a) Voyage and charter and revenues incidental to vessel operations..... 1,051,893,910.04

(2) From sales—

(a) Vessels .....	\$322,829,695.68
(b) Surplus hulls .....	5,979,443.62
(c) Cargoes of requisitioned Dutch vessels .....	4,830,180.97
(d) Housing projects .....	9,620,490.00
(e) Materials .....	33,279,957.71

(f) Total receipts from sales..... 376,539,767.98

(3) From sundry sources .....

48,571,865.39

(4) Total receipts from other sources..... 1,477,011,543.41

2. Total gross receipts .....

4,762,405,089.39

3. Expenditures directly involved in gross receipts from appropriations, allotments and other sources:

(a) On appropriation and allotment funds covered into United States treasury on account of statutory limitations.....

4,016,026.85

(b) On operation of vessels—

(1) Voyage expenses, maintenance, charter hire, etc. ....

1,777,250,380.11

(c) On sales—

(1) Vessels .....	\$371,500,399.26
(2) Surplus hulls .....	37,380,712.67
(3) Housing projects .....	11,644,303.28
(4) Materials .....	26,317,820.39

(5) Total expenditures directly involved in sales .....

446,843,235.60

(d) On sundry transactions .....

22,966,837.05

4. Total expenditures directly involved in gross receipts from appropriations, allotments and other sources .....

1,251,076,479.61

5. Gross proceeds from appropriations, allotments, and other sources.....

3,511,328,609.78

6. Expenditures indirectly involved in gross receipts from appropriations, allotments, and other sources:

(a) On contracts for and / or construction of projects suspended and / or canceled—

(1) Vessels—

(a) Contracts for vessels canceled.....	\$35,437,404.36
(b) Construction of vessels canceled and / or suspended .....	62,784,944.07

(c) Total expenditures on contracts for and construction of vessels canceled and / or suspended .....

98,222,348.43

(2) Materials, machinery, plant, and property .....

18,399,546.92

(3) Total expenditures on contracts for and / or construction of projects suspended and / or canceled .....

116,621,895.35

(b) On shrinkage in appraisal value versus expenditures—

(1) Surplus hulls, not sold.....	\$47,622,585.01
(2) Materials, plants, and property.....	81,284,816.82

(3) Total shrinkage in appraisal value versus expenditures .....

128,907,351.83

(e) On vessels released.....

11,607,702.89

(d) On vessels not taken over.....

15,581.24

(e) On vessels lost (see note 1).....

76,912,833.63

(f) On salaries, recruiting and other expenses (see note 2) .....

93,202,996.96

7. Total expenditures indirectly involved in gross receipts from appropriations, allotments, and other sources .....

427,268,361.90

8. Net proceeds from appropriations, allotments and other sources .....

3,084,060,247.88

Note 1.—Includes \$13,724,083.32 for vessels lost while under operation.

Note 2.—Includes \$15,312,834.98 for losses and damages to cargoes, etc., while under operation.

<sup>1</sup> No allowances for depreciation, insurance, interest, and lost vessels.

<sup>2</sup> Includes expenses incidental to requisitioning of Dutch vessels.

board took the gross proceeds from appropriations, allotments and other sources (item 5, left table), subtracted the \$3,285,393,545.98 received from appropriations, leaving a figure of \$225,935,063.80 which was called "gross proceeds".

3. Net profits or losses, as the case

## France Loses Also in State Shipping Test

*IN FRANCE* also, they are trying to effect a saving by having the state withdraw from operations of steamships. M. Morinaud has introduced a bill in the chamber of deputies calling for immediate cessation of government shipping operations and a liquidation of the government merchant marine by July 31, 1923.

The Bankers Trust Co., New York, reports that it has cost the French government 557,248,545 francs net loss, up to March 1, 1921, to operate its government owned fleet of merchant ships.

The French merchant marine increased from 2,600,000 tons gross in 1914 to 3,138,670 tons gross on Jan. 1, 1921, at which time there were 165 vessels of different types under construction, representing an additional 868,301 tons, thus bringing the potential strength of France's mercantile marine to over 4,000,000 tons gross.

Of this tonnage, 719,916 tons are owned and operated by the French government. This figure includes 266,973 tons, represented by vessels of enemy origin. These would be sold presumably to French interests, under the new proposal, thus keeping France's merchant marine intact.

In a report presented recently by M. Morinaud, the reasons given for this large deficit in operating the government merchant marine are:

- a—excessive cost of complicated financial administration,
- b—deficiency in proper control,
- c—frequent idleness of vessels in ports owing to trade conditions.
- d—excessive cost of repairs under government operation.

may be, for the same period.

This is answered in item No. 8, at the left. This is built up by subtracting from the net proceeds from appropriations of \$3,084,060,247.88, the moneys appropriated totaling \$3,285,393,545.98, leaving a net excess of ex-

penditures over receipts of \$201,333,298.10.

Another method of computing the same loss was to add the following losses and subtract the bookkeeping profit shown on vessel operations:

Excess of expenditures over receipts:	
Sales .....	\$70,303,467.62
Suspensions, cancellations, etc. ....	116,621,895.35
Shrinkage in values, appraisal versus expenditures .....	128,907,351.83
Lost vessels .....	76,912,833.63
Released vessels .....	11,607,702.89
Statutory limitations of appropriations and allotments....	4,016,026.85
Salaries and expenses, recruiting, etc .....	67,607,549.86

Total excess of expenditures over receipts .....\$475,976,828.03

Less:

Excess of receipts over expenditures:  
Operations of vessels..... 274,643,529.93

Net excess of expenditures over receipts, etc.....\$201,333,298.10

Either method of computation bring

### The Active Program on June 30, 1921

*WHEN the shipping board started its new fiscal year July 1, the ship construction program was about 99 per cent completed. On that date, the shipbuilding work remaining was as follows:*

	No.	Deadweight tons
Keels to be laid.....	0	0
Ships on ways.....	4	48,000
Ships outfitting .....	20	228,800
Ships delivered .....	2288	13,359,911
Totals .....	2312	13,636,711

the net loss to \$201,333,298.10.

4. The disposition of any net profits, if any such there have been.

This is answered in the statement in the table at the right. The old board explained the meaning of certain entries in that statement. The accounts receivable amounted to \$190,952,618.99. This included an item of \$77,348,779.50 representing contracts covering sales of vessels. The board admitted the doubtful character of much of this asset as the contracts in most cases would not be more valuable than the ships and the shrinkage in vessel values would similarly affect the net value of the sales contracts. Notes receivable amounted to \$75,236,673.28 of which \$69,016,010.61 were notes on vessels sold and subject to the same shrinkage in asset value as the accounts receivable.

In the case of loans and advances of \$105,546,767.13, there is \$31,377,599.49 secured by mortgages from and capital stock of realty companies organized to handle housing projects during the war. Then \$35,227,453.86 represents mortgages given in lieu of expenditures

## Where the Money Went

United States Shipping Board and United States Shipping Board Emergency Fleet Corporation

Statement showing disposition of net proceeds of receipts from appropriations, allotments, and other sources from inception to Feb. 28, 1921.

Item No.

1. Working capital:

(a) Invested in—

(1) General cash and cash funds .....	\$45,623,874.64
(2) Unexpended appropriations and allotment funds .....	40,778,165.56
(3) Accounts receivable .....	190,952,618.99
(4) Notes receivable .....	75,236,673.28
(5) United States Liberty and Kingdom of Belgium bonds .....	2,604,812.47
(6) Stocks and bonds of other countries.....	662,210.00
(7) Mortgages .....	6,555,218.38
(8) Certificates of indebtedness.....	21,197.72

(9) Loans and / or advances—

(a) Secured .....	\$66,606,053.35
(b) Secured in part .....	15,979,983.92
(c) Unsecured .....	22,960,729.86

(d) Total loans and / or advances.....	105,546,767.13
(10) Agents' account current balances.....	52,609,221.70

(11) Materials and supplies—

(a) Current .....	30,384,578.85
(b) Surplus and salvage—	

(1) Hulls, appraisal value....\$10,137,782.83	
(2) Materials .....	44,732,344.95

(3) Total surplus and salvage..... 54,870,127.78

(c) Total materials and supplies.....	85,254,706.63
---------------------------------------	---------------

(12) Construction in progress—

(a) Housing .....	85,839.24
(b) Dry docks and marine railways.....	6,765,372.85
(c) Machinery .....	6,818,536.42
(d) Vessels .....	133,513,259.55

(e) Total construction in progress..... 147,183,008.06

2. Total working capital .....\$753,028,474.56

3. Deductions from working capital:

(a) Items for which liable—

(1) Custodian receipts—	
(a) Unclaimed wages .....	1,007,060.35
(b) Payments on canceled sales, awaiting disposition .....	4,711,526.72
(c) Deposits .....	2,472,724.02

(d) Total custodian receipts for which liable 8,191,311.00

(2) Liabilities—

(a) Vouchers payable.....\$18,720,773.84	
(b) Accounts and charter hire payable .....	61,747,648.74
(c) Mortgages payable .....	2,504,000.00

(d) Total liabilities..... 82,972,422.58

4. Total deductions from working capital..... 91,163,733.67

5. Net working capital .....661,854,740.89

6. Fixed and donated capital:

(a) Invested in—

(1) Furniture, fixtures, automobiles, etc.....	2,125,340.87
(2) Land and buildings .....	14,246,763.41
(3) Transportation facilities .....	9,193,679.98
(4) Plant and property .....	138,992,817.95
(5) Dry docks and marine railways.....	2,171,675.29
(6) Fuel oil stations .....	536,913.24
(7) Vessels .....	2,254,908,316.25

7. Total fixed and donated capital ..... 2,422,195,506.99

8. Deductions from fixed and donated capital.....

9. Net fixed and donated capital ..... 2,422,195,506.99

10. Net working and fixed and donated capital.... 3,084,060,247.88

for plant and vessel construction. An item of \$15,979,983.92 is partially secured by mortgages given in lieu of expenditures in housing projects. An item of \$22,960,729.86 is unsecured loans consisting of expenditures in connection with plant and ship construction, receivers of steamship companies that purchased shipping board vessels, and insurance syndicates. The whole item, as the board frankly admits, will actually bring in only such amount as represents the after war values, without regard to the actual war expenditures. These decreased returns will not be cleared up for 5 to 10 years under the terms of the mortgage agreements.

The entry of \$52,609,221.70 shown

as "agents account current balances" is largely the balance due from owners of requisitioned vessels. This latter figure is \$43,387,531.37 and is offset by the charter hire payable to such owners of \$42,592,825.98.

The acknowledged and recorded liabilities of the Emergency Fleet corporation are set by the old board as \$91,163,733.67. This is listed in the table as a deduction from working capital. "Claims relating to the construction program and other payable items amounting to many millions of dollars" are not included in this item and are not shown, the old board stating that this would be misleading as the total of claims would bear little re-

lation to the actual amount of settlement. These unlisted items were separately estimated as including \$146,796,548.34 for estimated construction program claims payable; \$11,309,962.77 for awards payable to former owners, requisitioned hulls; and \$21,665,719.91 for estimated insurance, accident and damage losses payable, a total of \$179,772,231.02.

These estimated claims added to the admitted liabilities indicate a total of \$270,9365,964.69 owed by the board on Feb. 28 of this year.

The senate resolution also disclosed that the board was employing 8932 persons, exclusive of the 43,000 on board ships operated for the board. These 8932 employees included 8544 ashore and 388 afloat.

## Hold American Legion Is Worth Price Paid

New passenger liners like the AMERICAN LEGION consumed many extra millions of dollars through continual changes in plans. As a result their completed cost when ready for their first revenue earning trip was easily twice as much as their present day value. The same situation is similarly true in other shipbuilding countries where buyers found their new ships, contracted for a year or more ago, have only one-half or less of their value left when the shipyard makes delivery.

Frank C. Munson, president of the Munson Steamship lines which operates American passenger liners to South America, finds encouragement over the

opportunities now offered to Americans to build up trade with South America.

"With vessels of the type of the AMERICAN LEGION," he says, "I feel satisfied that the American lines, in spite of the higher wages paid to seamen, can compete successfully with the ships of other nations. I believe that the American inventive genius will overcome our handicaps.

"The advance that this ship represents over other steamers may be indicated by a comparison with the ex-German liner AEOLUS, formerly the GROSSER KURFURST. Although the AEOLUS is of corresponding size and tonnage, the AMERICAN LEGION costs 30 per cent less to operate, has double the amount of cargo space, carries just as many passengers and will make a speed of two knots more."

# Business Leaders Will Aid New Board

**T**O OPERATE the fleet, the shipping board acting on the recommendations of private shipowners, appointed J. Barstow Smull, William J. Love, both of New York, and A. J. Frey, Los Angeles and San Francisco. The original recommendation was to name only one operating head but since the largest privately owned fleet numbers only 107 vessels it was regarded as essential to have more than one operating chief for the board's 1440 ships—not counting the wooden vessels.

Mr. Smull, the board points out, is a half owner in one of the largest, if not the largest, ship brokerage firms in America. His firm has an income of about \$500,000 a year, and his share is \$250,000. He was the unanimous choice of the shipowners and ship operators associations, every owner and operator describing him as the only man they could agree on. Mr. Lasker stated that "I remained for 12 days in New York with Mr. Smull, getting his refusal day after day, and day after day telling him 'they have convinced me that you are the man who, if associated with us, will make the promise of success pretty sure, and without you I don't think we can succeed.'"

Mr. Smull was chairman of the chartering committee of American ships during the war. His work at that time has made his abilities known throughout the world.

The ship operators unanimously recommended Mr. Love, a choice which was also approved by the shipowners. He was the New York manager of the largest British firm doing business in this country. He is an American citizen, born in this country, and ranked

as an expert in marine traffic matters.

Mr. Frey represents the Pacific coast, where he has held official positions with the Pacific Mail Steamship Co. and with the Emergency Fleet corporation.

These three men are responsible for suggesting to the board the broad policies to follow in operating, chartering and disposing of the ships. After approval of a policy, President Harding and the board has given assurance that these three vice presidents will have a free hand in carrying through the policy. President Harding impressed upon them the necessity of operating these boats on the basis that they now represent all the stockholders or in other words, all the people of the country and that for the people's protection, they should make decisions solely on the grounds of efficiency. Politics is to be kept from hampering their actions.

Elmer Schlesinger, Milwaukee, is the vice president acting as chief counsel.

Several weeks after these appointments, the board announced the selection of the fifth vice president to handle vessel and shipyard sales and salvage problems. He is Joseph W. Powell, formerly vice president of the Bethlehem Shipbuilding Corp., Bethlehem, Pa. His duties will also embrace the reorganization of the financial, accounting and sales departments of the board.

Mr. Powell first was offered the position of senior vice president and general manager of the Emergency Fleet corporation at a large salary, but refused. His assent was finally won to accepting his present position but has refused any salary for his

services. His agreement calls for having an absolutely free hand for three months in the departments he will control, his intention being to give up government service at the end of that time.

Mr. Powell ranks high among American shipbuilders and marine authorities. He is a graduate of the United States Naval academy and served in the construction corps of the navy. He resigned in 1906 to associate himself with the William Cramp & Son Ship & Engine Building Co., Philadelphia. In 1914, he became president of the Fore River Shipbuilding Corp. and three years later was placed in charge of the five big shipbuilding properties of the Bethlehem company. He only recently resigned from that position. He is 44 years old. His work is one of the most important entrusted to the new board, as the proper organization of the sales, financial and auditing departments has been beyond the capacity of members of the earlier boards.

The selection of Mr. Powell completes a circle of experienced and recognized business authorities now grouped around the new board. In addition to these five vice presidents, the claims commission numbers Homer L. Ferguson, president of the Newport News Shipbuilding & Drydock Co., Newport News, Va., as one of its members.

Other men have been named to numerous minor posts in the reorganized shipping board and their selection has brought out the approval of old time merchant mariners who long have felt the need of practical man in control of the nation's shipping.

Puts Operating Control in Hands of Three

The decision to place actual operating control of the great government fleet in the hands of three vice presidents was the idea of Chairman Lasker and was counter to the suggestion of the private steamship owners.

Experienced American operators recommended a single director of operations with complete authority in the selection and control of his assistants. Two of his principal assistants would have had control of finding cargoes and of keeping ships in repair respectively.

The Lasker plan, as adopted, places control in the hands of three men, acting respectively as vice presidents of the Emergency Fleet corporation in control of traffic, of the physical operation of the vessels and of allo-

The spirit of mutual helpfulness built up between the shipping board and the private operators is a significant evidence of the changed attitude of the board. It testifies to the sincerity of the board's efforts to put its fleet in order and to cut off the waste which has been a handicap to private operators struggling to meet that heedless kind of competition.

The shipowners whose views were sought in a called meeting included H. H. Raymond, president of the American Steamship Owners' association and president of the Clyde Steamship lines; W. Averill Harriman, chairman of the board of directors of the United American lines; P. A. S. Franklin, president of the International Mercantile Marine Co.; and Frank C. Munson, president of the Munson Steamship lines. The ship operators included C. H. Potter, president of the United States Ship Opera-

Complete plans for reconditioning have been ready for some time, the plans being drawn from the ship itself following the refusal of the German builder to release the plans for less than \$1,000,000. The ship has been kept in first class condition during her inactivity, has been repainted and the machinery properly looked after. She can proceed to sea on short notice. The cost of keeping the ship in condition has been about \$50,000 a month while estimates on her reconditioning cost run from \$4,000,000 to \$12,000,000.

Would Keep Politics Out of Board's Work

Politics injected into the attempted business management of governmental enterprises has always been the blight which made incompetence and waste an inevitable partner in the federal

Vessels Owned and Controlled by the Shipping Board

ON JULY 1, the shipping board owned and controlled a fleet of 1740 vessels aggregating 11,323,668 deadweight tons. This total embraces 1148 new steel vessels built under contract and 229 steel vessels taken over under the requisitioning order. Ex-German and Austrian vessels accounted for 42 more of 365,732 deadweight tons. In the following table, is the complete record of the shipping board's fleet divided by both by type of ship and the methods by which secured:

	Total		Cargo		Cargo & Pass.		Tankers		Refrigerators		Colliers	
	No.	D.W.T.	No.	D.W.T.	No.	D.W.T.	No.	D.W.T.	No.	D.W.T.	No.	D.W.T.
Contract steel vessels	1148	8,108,513	1053	7,165,772	13	158,754	74	716,706	8	67,281	0	0
Requisition steel vessels	229	1,546,596	205	1,373,824	0	0	14	110,975	8	50,825	2	10,972
Wood and composite vessels	288	1,066,649	288	1,066,649	0	0	0	0	0	0	0	0
Concrete vessels	10	62,783	2	6,500	0	0	8	56,283	0	0	0	0
Purchased vessels	22	173,395	18	156,135	2	12,200	1	1,200	0	0	1	3,860
Seized German and Austrian vessels	41	359,885	17	112,918	24	246,967	0	0	0	0	0	0
Ex-German sailers	2	5,847	2	5,847	0	0	0	0	0	0	0	0
	1740	11,323,668	1585	9,887,645	39	417,921	97	885,164	16	118,106	3	14,832

cating the ships to private operators.

The new board looks upon the operation of the fleet from now on as the crux of the entire situation. If they can be operated with a closer relation to sound business principles than in the past, the country will be saved huge sums of money and the merchant marine started fairly on the road to permanent success. If operations are continued in the slipshod fashion which has prevailed, the new board will set up a record equally as indefensible as its predecessor.

For that reason the board set up an operating division patterned after successful American and British companies. Mr. Lasker emphasises that no British company entrusts the operation of more than 40 ships to any one man.

The shipowners were given every opportunity to present their views both upon the reorganization of the operating division and upon the best men qualified to fill the new positions.

tors' association and president of the Potter Transportation Co.; J. Barstow Smull, vice president of J. H. Winchester & Co.; Clifford Mallory of C. D. Mallory & Co.; and August F. Mack, president of the Cosmopolitan Shipping Co.

Works Out Future Use of Leviathan

The future of the great LEVIATHAN, according to officials of the shipping board has been put up to Commissioner Chamberlain to work out. He has been charged with the responsibility of making a preliminary survey and decision as to what to do with the immense liner.

The ship has been cared for by the International Mercantile Marine Co. under a contract calling for this firm caring for the ship while inactive, acting as the board's representative during reconditioning and as agent and charterer of the ship when she returns to service.

venture. The influence of politics was clearly evident throughout the war and afterward in various phases of both the ship construction and the ship operation program.

The cleansing and purifying work undertaken by the new board carries as one of its cardinal principles the complete divorce of politics from the operation of the fleet. The new board members regard the job of reducing the cost of running the fleet as of supreme importance and difficulty. Politics would ruin all hopes of accomplishing an already herculean task.

Evidence of the sincerity of this purpose to submerge politics came from Chairman Lasker in commenting to the writer recently on the appointment of Joseph P. Tumulty, former secretary to ex-President Wilson, as temporary receiver of the Pusey & Jones Co., with shipyards at Gloucester, N. J., and Wilmington, Del.

"We worked vigorously against the appointment of a receiver," said Mr. Lasker, "as well as against the selec-

tion of Mr. Tumulty. Without any disparagement of Mr. Tumulty, the country at large can only regard his selection as politically inspired. We want even the appearance of politics kept clear of our work. We are now opposing the effort to make the receivership permanent, and are hoping Mr. Tumulty will decline even the temporary appointment".

Also the various claims against the board are being handled by the best legal talent available. The Pusey & Jones claim has been placed by the new board in the hands of the general counsel of the United States Steel Corp. The greater fees paid to experienced lawyers over those going in the past to relatively untrained men are expected to be offset by savings through reduction in the amounts paid in settlements.

### Believes Costly Experts Cheaper in End

Chairman Lasker has had sufficient experience in business to learn the ultimate cost of hiring cheap labor to do skilled work. His insistence upon obtaining the best possible assistants is reflected in the \$30,000-a-year operating vice presidents of the Emergency Fleet corporation to run the ships, and also in his search for the best lawyers to handle the huge claims backed up against the government.

"We know that criticism will follow the board's decision to obtain high grade men at salaries matching the private scale," commented John Callan O'Laughlin, secretary to the chairman, former assistant secretary of state, former confidant and associate of Theodore Roosevelt, and business associate of Mr. Lasker in private life. "But no one with the new board has ever witnessed such colossal business breakdown as is shown by the condition of shipping board affairs today.

"Take this item of claims. In New York alone 1700 cases of action against the government were being handled by three lawyers at nominal salaries although the complainants frequently retained some of the country's greatest legal authorities.

"In one case \$67,000,000 had been paid to one firm without any contract or agreement ever having been drawn—merely an oral understanding. While this case is apart from the question of claims, it typifies the muddle into which the board's whole system—or lack of system—had fallen with regard to records, files and the first elements of business practice.

"With the total claims running up to \$300,000,000, the board believes it is merely sound judgment to spend a few

thousand dollars more this year to get competent legal assistance which can pare millions of dollars off these claims.

"Many of the claims are on ship accidents where the complainant has taken depositions from the officers and sailors within a few hours after the accident but the government, if any search for evidence was started at all, did not begin to function until after the ship had been repaired and sailed on another voyage. By this time investigators finally reached the ship, the officers and

### How Ship Output Varied in Past 12 Years

The influence of the war demand for ships expressed primarily in the tremendous construction program of the shipping board, in building up the ship tonnage produced in American shipyards, is shown in the following record of United States ship output in the last 12 years.

Fiscal year	Deadweight tons
1910.....	513,102
1911.....	436,743
1912.....	349,003
1913.....	519,232
1914.....	474,375
1915.....	337,683
1916.....	488,119
1917.....	996,718
1918.....	1,951,302
1919.....	4,989,931
1920.....	5,694,567
1921.....	2,863,465

crews had scattered so that we are approaching many claims with the evidence all on the other side.

"Under a system which allowed such conditions to develop and continue, the board feels the best legal talent of the country is essential to protect the taxpayers from the great cost of settling these claims on the advice of unexperienced adjusters. At the best, the cost will be tremendous, 50 cents on the dollar running the settlements up to a total of \$150,000,000."

### Outline Economic Policy

How economy in the use of public money is to be obtained was outlined in a general way by the three new operating heads at their first conference with private steamship operators. This plan calls for:

1. A staff of practical steamship men is to be built up and to this staff American steamship companies must assist by consenting to the drafting from their ranks of any men needed to aid the executive operating committee.

2. Cut expenses by reducing the salaried staff of the division of operations and by eliminating some operators on berths which are now oversupplied with tonnage.

### Pomerene Is for Strictly American Marine

Senator Pomerene of Ohio, is a vigorous advocate of any measure which he considers best for the nation as a whole. Sectional bias and the coddling of one class at the expense of another have no place in his conception of a senator's duties. He has actively opposed any legislation favoring any organized class even when other senators were cowed by show of voting strength and he took an equally vigorous stand on the sugar question, pinning the blame on the Democratic administration, even though the senator himself is a Democrat.

The senator stated in a conversation with the writer that if any one subject ranked uppermost in his thoughts, it was the American merchant marine. His platform is expressed in his own phrase of "ships without subsidy if possible but ships with subsidy if necessary."

"The decline of the American merchant marine during and after the civil war," said Senator Pomerene "always ranked in my judgment as an economic crime. The ALABAMA and other confederate raiders sank about 100 vessels and sales to Great Britain took away 600 from our flag. These losses could have been met if capitalists had not turned their minds and funds westward, where they believed profits could be obtained with less effort and smaller risk.

"The example of the big department store relying on its principal competitor to deliver its goods and frequently collect its bills is familiar but it properly expresses the position of the United States in trying to run an export and import store without means of transporting it goods.

"A merchant marine is a compelling necessity to this country. Whatever comes of the present situation, our ships must not be allowed to go to foreigners. They must be operated under the American flag.

"Successful business men criticize the government for inefficiency but where these men have taken years to weld together an efficient organization, the government has had only months to try and throw together a ship operating organization. I am not satisfied that the government cannot operate ships successfully although the disastrous experience with the railroads and the parallel experience so far with ships are strong evidence to the contrary.

"I will support any policy which is determined to be the best for our merchant marine even though subsidies

are a necessary part of that policy, but the purpose of the policy must be the retention of our ships under American ownership for the service of the American people."

Ship values have dropped to a record low point with few signs of meeting any demand from buyer. This fact has reopened discussion of the question of selling surplus American ships to Germany, the only country now willing to buy vessel property. England's recent action in calling for bids from residents of any country on the seized German ships has been met by a number of sales to Germans, one ship in particular being a large, new passenger liner.

## Only Two Less Employees Than Year Ago

The spectacular decrease during the past year in the tonnage of shipping board vessels actively employed has not brought about a correlative decline in the number of employees in the division of operations. Where private firms have met slackened demand for their products by curtailing their staff, the board continues to employ the same number of persons to supervise the operations of only one-half as large a fleet.

Information shows that this division a year ago employed 232 persons in the home offices and 662 in district offices, a total of 894. The salaries

paid were \$456,520 and \$1,402,260 respectively, a total of \$1,858,780. At the close of last year, 254 home office employees were drawing \$523,540 while 672 district employees were drawing \$1,414,440, a total of 926 employees drawing \$1,937,980. At the end of last month, the number of home office employees had dropped to 236 drawing \$492,180, of district employees had dropped to 656 drawing \$1,346,860, or a total of 892 employees drawing \$1,839,040.

In the past year, the division has thus decreased its staff by two, 892 against 894 a year ago, and its salary account by \$19,740, from \$1,858,780 to \$1,839,040. The new board expects to make a savings in this department.

# Yards Deliver 218 Ships in Past Year

**D**URING the year ended June 30, 1921, the board accepted delivery of 218 vessels of 1,737,550 deadweight tons from American shipyards. This total is 30.51 per cent of the total delivered in the preceding year and left only 24 ships of 276,800 deadweight still undelivered. Of these 20 were being outfitted and four were still unlaunched. These 24 ships are all steel contract vessels. The program of requisition steel ships, contract wood and concrete ships was completed during the past fiscal year. The contract composite vessels had all been delivered in the fiscal year ended June 30, 1920. Monthly record of ship deliveries follows:

	No. of ships	Deadweight tons
1920		
July .....	35	272,150
August .....	32	219,375
September .....	34	246,225
October .....	33	218,300
November .....	14	103,250
December .....	18	163,350
Total .....	166	1,222,650
1921		
January .....	13	113,800
February .....	11	104,450
March .....	6	67,200
April .....	8	78,750
May .....	8	86,100
June .....	6	64,600
Total .....	52	514,900
Grand total .....	218	1,737,550

All of the vessels undelivered on July 1 are, with one exception, of 10,000 deadweight tons and some larger.

## Active Program by Types of Vessels

*AS FINALLY worked out, the ship program called for building 2312 ships of 13,636,711 deadweight tons. Of these, 1693 ships were steel and 589 were wood. The following table shows the actual program divided both by types of ships and by the materials of construction:*

	Steel	Wood	Composite	Concrete	Total number	Total deadweight tons
Cargo .....	1429	304	18	4	1755	10,777,434
Tanker .....	138	1	..	8	147	1,427,730
Refrigerator .....	19	..	..	..	19	161,400
Transport .....	22	..	..	..	22	179,775
Passenger and cargo .....	25	..	..	..	25	308,972
Barges .....	6	28	..	..	34	93,200
Tugs (ocean) .....	46	13	..	..	59	†
Tugs (harbor) .....	8	56	..	..	64	†
Finished hulls .....	..	115	..	..	115	447,700
Hulls converted to barges .....	..	56	..	..	56	206,000
Hulls converted to sailers .....	..	8	..	..	8	30,500
Barges converted to schooners .....	..	2	..	..	2	4,000
Harbor tugs (hulls only) .....	..	6	..	..	6	†
Total .....	1693	589	18	12	2312	13,636,711

†No tonnage given for tugs.

Engineers Works, China, with two cargo steamers of 10,000 tons each. The Virginia yard has suspended operations so delivery date on its ship is uncertain. The tankers were scheduled for delivery in July and August, the California freighters by November, the Chinese freighter by October, and the last of the passenger liners by March 1, 1920.

## "Balance the Fleet" Adds Passenger Liners

At its peak the ship construction plan worked out during the war by officers of the shipping board and of the Emergency Fleet corporation called for the construction of 3270 vessels of 18,407,276 deadweight tons. These totals include all types, not only the cargo vessels for direct war service but troop transports, harbor tugs, barges, refrigerators, etc.

The board, after the armistice, took up its policy of "balancing the fleet," cutting off construction for purely war purposes as well as some ships on which building operations had not advanced to a point where cancellation would have been more expensive than completion.

According to information supplied by the board, 958 ships were definitely canceled, their deadweight tonnage being



4,770,565. Cancellations thus amounted to 25.8 per cent of the maximum program. The active program remaining was 2312 ships of 13,636,711 deadweight tons. Of these, 2288 ships of 13,359,911 deadweight tons had been delivered by June 30, 1921, leaving 20 ships of 228,800 deadweight tons outfitting and 4 ships of 48,000 deadweight tons still to be launched.

The complete record showing the original program, cancellations and final program follows:

Original Program		
Class	No. of ships	Deadweight tons
Requisitioned steel.....	419	2,963,406
Contract steel.....	1,741	11,914,670
Contract wood.....	1,017	3,052,200
Contract composite.....	50	175,000
Contract concrete.....	43	302,000
Total.....	3,270	18,407,276
Cancelled		
Class	No. of ships	Deadweight tons
Requisitioned steel.....	35	276,140
Contract steel.....	432	2,986,975
Contract wood.....	428	1,166,950
Contract composite.....	32	112,000
Contract concrete.....	31	228,500
Total.....	958	4,770,565
Active Program		
Class	No. of ships	Deadweight tons
Requisitioned steel.....	384	2,687,266
Contract steel.....	1,309	8,927,695
Contract wood.....	589	1,885,250
Contract composite.....	18	63,000
Contract concrete.....	12	73,500
Total.....	2,312	13,636,711

## "Balance the Fleet" Adds Passenger Liners

When the armistice was signed, the shipping board found itself committed to the construction of various types of ships not suited for peacetime uses. In some cases construction work was already well advanced but in many instances, the contracts could have been cancelled without great expense. In the case of its large troop transports, the board saw an opportunity to "balance the fleet," a phrase much in favor in the months following the war.

These transports after undergoing several alterations in plans finally evolved into the combination cargo and passenger liners which have been entering service in recent months. The ships are of original design and many private operators regard them as of immense value in building up American trade. The principal features of the passenger liner program follow:

Two types of liners were built, respectively 502 and 535 feet in length over all. The former accommodate 84 first class passengers and have 465,940 cubic feet of cargo space. Their speed is 14 knots. The board intends to add steerage quarters to these vessels, this service being profitable while the cargo

space exceeds freight offerings on any of the general routes. The larger vessels accommodate 260 first class passengers, 300 steerage passengers and have

## What the Shipyards Did

1916	Keels laid	Ships launched	Ships delivered
April	1	8,130	..
May	1	7,359	..
June	2	18,530	..
July	4	42,900	..
Aug.	2	17,800	..
Sept.	1	7,000	..
Oct.	6	36,300	..
Nov.	9	54,230	..
Dec.	4	32,800	..
Total	30	225,049	..
1917	Keels laid	Ships launched	Ships delivered
Jan.	10	101,800	..
Feb.	7	54,186	..
March	13	111,316	..
April	23	157,600	2
May	28	173,185	3
June	20	101,230	4
July	20	100,475	7
Aug.	52	246,680	16
Sept.	62	264,605	12
Oct.	64	272,760	17
Nov.	92	454,620	20
Dec.	71	365,105	25
Total	462	2,403,562	106
1918	Keels laid	Ships launched	Ships delivered
Jan.	63	315,300	16
Feb.	70	372,325	31
March	82	479,825	44
April	89	488,725	46
May	91	482,870	74
June	81	448,195	49
July	129	743,525	124
Aug.	105	539,708	83
Sept.	103	513,270	93
Oct.	124	651,691	80
Nov.	93	460,008	83
Total	1110	5,951,900	812
1919	Keels laid	Ships launched	Ships delivered
Jan.	54	353,683	62
Feb.	58	338,200	68
March	75	465,093	89
April	85	554,046	116
May	84	619,178	134
June	67	498,475	95
July	76	495,900	114
Aug.	43	306,900	91
Sept.	41	283,275	82
Oct.	30	232,725	70
Nov.	18	151,825	75
Dec.	20	165,550	65
Total	651	4,464,850	1061
1920	Keels laid	Ships launched	Ships delivered
Jan.	11	103,900	44
Feb.	9	82,950	34
March	8	75,200	44
April	4	36,400	42
May	..	..	18
June	4	37,000	33
July	6	73,000	31
Aug.	1	10,200	16
Sept.	2	21,100	9
Oct.	1	10,000	10
Nov.	4	41,300	9
Dec.	4	43,300	11
Total	54	534,350	301
1921	Keels laid	Ships launched	Ships delivered
Jan.	2	22,000	3
Feb.	2	23,000	6
March	1	12,000	4
April	..	..	4
May	..	..	6
June	..	..	5
Total	5	57,000	28
Grand total	2312	13,636,711	2308

466,133 cubic feet of cargo space. Their speed is 17½ knots.

All of the 502-foot class liners have been delivered and are in regular service. These vessels are the PANHANDLE STATE, OLD NORTH STATE and CENTENNIAL STATE operating between New

York, Queenstown, Boulogne and London; CREOLE STATE, WOLVERINE STATE and GRANITE STATE operating between San Francisco, Honolulu, Manila, Saigon, Singapore, Colombo and Calcutta; BLUE HEN STATE now being altered to provide steerage quarters. Only two vessels will be run regularly on the New York-London route, and two will operate between New Orleans, Cuba and Spain. The four vessels in these two routes will be the three now running to London and the BLUE HEN STATE.

Seven of the 535-foot type have been delivered. They are the HAWKEYE STATE and BUCKEYE STATE, operating between Baltimore, San Francisco and Honolulu; the GOLDEN STATE and EMPIRE STATE, operating between San Francisco, Honolulu, Yokohama, Kobe, Shanghai, Manila and Hongkong; WENATCHEE, SILVER STATE and KEYSTONE STATE, operating between Seattle, Kobe, Yokohama, Shanghai, Hongkong and Manila.

The other passenger services, maintained with ex-German vessels, through the Munson Steamship lines and the United States Mail Steamship Co., are between New York and the east coast of South America; between New York, Genoa and Naples; between New York, Bremen and Danzig and between New York, Plymouth, Cherbourg and Bremen. Two more of the 535-foot type, the AMERICAN LEGION and the SOUTHERN CROSS, are just being placed in the Brazilian-Argentine service.

## Finish 23 Troop Ships After Armistice

When the armistice was signed, the shipping board had in effect contracts for a number of troop transports. The majority of these contracts, according to the board, were cancelled but construction on 23 vessels had progressed to a point that made cancellations inadvisable, in the opinion of the board. This attitude was taken not only because of what claims might be presented, but from a conviction that these vessels, finished as passenger ships, would "round out and balance the fleet."

After numerous alterations of plans these ships have finally begun to appear in service as the familiar combination passenger and cargo liners. Of these ships, 16 are 518 feet between perpendiculars, 72 feet beam and 50 feet depth. The other 7 are 502 feet between perpendiculars, 62 feet beam and 42 feet depth. The larger ships have greater speed. All are twin-screw and burn oil.

The 502-foot liners carry 78 first class passengers and 118 crew in addition to 9069 tons of freight of which 52,300 cubic feet can be used for refriger-

ator cargo. Their speed is 15 knots. Several of these ships have been converted since delivery to carry 600 third class passengers. All have been delivered.

The 518-foot liners carry 260 first class passengers, 300 third class and 210 crew in addition to 7000 tons of freight including 2590 cubic feet for cold storage freight. Their speed is 17½ knots. Six had been delivered by June 30.

## Ship Board Operates on 410 Trade Routes

During the past 12 months, eight new trade routes have been established by the shipping board. These are:

Montreal to Norwegian, Danish, Swedish and Finnish ports.

Montreal to Antwerp, Rotterdam, Hamburg.

Antwerp, Rotterdam, Hamburg, London to Black Sea ports.

Antwerp, Rotterdam, Hamburg, London to Mediterranean ports.

Baltic, Scandinavian coasting route.

Route between ports of the Mediterranean.

West Africa to Continental and United Kingdom ports.

Paranagua, Brazil to River Plate.

The Montreal routes, it is understood, were organized to supplement similar services from Boston and Portland, as the Canadian city is the outlet for much of the summer traffic which clears through the New England ports in winter. The various European services listed generally are routes previously covered by German ships. The West Africa line was decided upon as necessary to protect shippers who feared to use the American lines direct from this country to Africa, for fear of reprisal by foreign lines who controlled the trade of these countries with Europe.

The board now operates on 410 general cargo routes, 393 of these being between United States and foreign ports and between United States ports, with 17 between foreign ports. These routes include all the principal ports of the world and are divided as follows:

Between United States and Foreign Ports

From North Atlantic.....	220
From South Atlantic.....	63
From Gulf .....	69
From Pacific Coast.....	27
Between United States ports ..	14
Between Foreign ports .....	17

410

These 17 foreign routes are those from the River Plate to Europe, refrigerator; West Indies and Mexico to continental Europe, general; Far East

## Steel Ships Tied Up on June 30, 1921

	Under 5000	5000 to 7000	7000 to 9000	Over 9000	Refrig. stnrs.	Tank stnrs.	Total stnrs.	Total tonnage	Aver. cost per ship per month
Boston district .....	6	2	8	1	..	..	19	112,741	\$713.00
New York district .....	66	26	70	43	6	1	212	1,429,334	684.00
Philadelphia district .....	19	8	29	13	2	..	71	525,436	253.72
Baltimore district .....	6	3	9	8	..	1	27	210,661	459.65
Norfolk district .....	165	9	17	14	..	..	202	920,716	459.35
Savannah district .....	5	1	5	5	..	..	16	113,915	424.25
New Orleans district .....	45	3	8	2	..	45	103	675,151	314.00
San Francisco district .....	2	..	20	19	..	..	49	421,013	580.00
Seattle district .....	..	1	4	2	..	..	7	58,560	752.25
Total .....	314	56	170	104	8	52	704	4,468,127	\$498.74
Tied up but not delivered to new manager agents .....	4	2	7	4	..	2	19	147,308	.....
Tied up and sold but not yet delivered .....	1	..	5	1	..	..	7	52,629	.....
Ordered tied up but not yet at station .....	12	3	10	4	..	9	48	367,407	.....

to Europe, general; West coast of Africa to United Kingdom, general. In addition, there are the feeder and coastal services. Two of these feeder services with a fleet of 9 vessels, averaging 3500 deadweight tons, operate in the territory from Tientsin, China, to Calcutta, India. These vessels handle cargo between smaller ports but are primarily valuable in gathering cargo for transshipment at the principal ports to larger freighters. The plan of feeder services has been broadened during the past year to include the Scandinavian-Baltic territory, the Mediterranean, continental Europe and the Mediterranean, and continental Europe to Mediterranean and Black Sea ports.

## What Refitting Has Cost

About \$20,000,000 has already been spent in refitting the German ships seized during the war. These ships are: In passenger service, AEOLUS, AMERICA, POTOMAC (ex-ANTIGONE), BLACK ARROW, CALLAC, HURON, MARTHA WASHINGTON, POCAHONTAS, PORTO RICO, SUSQUEHANNA, HUDSON (ex-NEW ROCHELLE) and PRINCESS MATOIKA; in cargo service, ARTEMIS, ETEN and OTSEGO; reconditioning for passenger service, GEORGE WASHINGTON; awaiting reconditioning, AGAMEMNON, LEVIATHAN, MOUNT VERNON and PRESIDENT GRANT; laid up, AMPHION, FREEDOM, MERCURY, NANSEMOND, ORION,

PHILIPPINES and VON STEUBEN; in navy service, BRIDGEPORT; in army service, MADAWASKA; sold, ARCADIA, MOUNT CLAY (ex-DE KALB) and SUWANEE.

## Huge Number of Employees on Board Payroll

What part of the "complete breakdown" in the accounting and operating division of the shipping board is due to numerous employees getting in each other's way, is largely guesswork. But a glance at the salary list arouses strong suspicion that part of the trouble came from this source.

On July 1, the shipping board was employing 6625 employees to supervise its 745 ships—this total of employees excluding the officers and men actually serving on board ship. The organization of the board was divided as follows:

Division	Number
Home office .....	420
District of Columbia office .....	26
General comptroller .....	3,101
Construction and repairs .....	723
Division of operations .....	885
Treasurer .....	160
Surplus and sales .....	691
Construction claims board .....	45
Transportation and housing .....	24
Marine supplies .....	6
Consulting engineers .....	2
Legal department .....	126
Miscellaneous .....	416
Total .....	6,625

The salaries paid to these 6625 employees aggregated \$13,248,969 a year.

## The Tie-Up Record of the Past Year

	Cargo & pass.												Refrigerators				Colliers				Barges				Per cent of total fleet							
	—Cargo—				D.				D.				D.				D.				D.				—Total—				D.			
Month	No.	D.	W.	T.	No.	W.	T.	No.	W.	T.	No.	W.	T.	No.	W.	T.	No.	W.	T.	No.	W.	T.	No.	D.	W.	T.	No.	W.	T.			
1920																																
July	119	435,468		4	32,502				.....		.....		.....		.....	31		.....		.....	154	467,970		9.46		4.79						
Aug.	180	672,786		4	32,502				.....		.....		.....		.....	27		.....		.....	211	705,288		12.58		6.93						
Sept.	238	949,470		6	60,167				.....		.....		.....	2	7,120	24		.....		.....	270	1,017,357		15.86		9.78						
Oct.	278	1,186,714		6	45,012				.....		.....	2	11,758		.....	25		.....		.....	312	1,243,484		18.11		11.77						
Nov.	370	1,621,306		9	70,412				.....		.....	2	11,758		.....	25		.....		.....	406	1,703,476		23.35		15.86						
Dec.	465	2,142,386		8	65,962				.....		.....	4	26,204	1	5,486	26		.....		.....	504	2,240,038		28.82		20.62						
1921																																
Jan.	575	2,766,741		10	83,472				.....		.....	4	26,204	2	9,346	24		.....		.....	615	2,885,763		35.49		26.59						
Feb.	705	3,674,402		8	65,262	7	58,938		.....		.....	3	17,834	2	9,346	23		.....		.....	748	3,825,782		42.57		34.66						
Mar.	840	4,597,774		8	65,662	30	255,492		.....		.....	2	11,758	3	13,206	26		.....		.....	909	4,943,892		51.53		44.65						
Apr.	918	5,156,495		10	79,761	45	383,723		.....		.....	3	20,128	3	13,206	29		.....		.....	1008	5,653,313		56.72		50.75						
May	921	5,136,966		9	79,621	46	404,148		.....		.....	5	34,497	2	7,720	29	3	5400		.....	1015	5,668,352		56.99		50.68						
June	913	4,920,130		12	91,794	50	442,562		.....		.....	9	62,860	3	13,206	29	4	7200		.....	1020	5,537,752		56.51		48.64						

The comptroller's division with 3101 employees is the division which, according to Chairman Lasker, has audited only 3000 of the 9000 voyage accounts completed since January 1920—an average of less than one audit per employee in 18 months. The New York offices of the shipping board alone employ 248 persons with an annual payroll of \$514,980.

Another illuminating phase of how the board has been run is shown in the total of 109 employees on the recruiting staff at a time when thousands of seamen and officers are out of work through ship tie-ups. A second group of employees not included in the table above numbers 416 persons drawing \$720,200 annually. These additional divisions are:

Division	Numbers	Annual salary
Supercargo .....	194	\$349,200
Building payrolls .....	98	105,921
Investigation .....	20	55,780
Recruiting .....	104	209,299
Total .....	416	\$720,200

The full story is not known even yet as the tables above fail to include the large European and foreign organizations of the board. One report indicated 140 persons engaged in a supervisory capacity abroad. The best approximation is that with the men on

## The Wood Ship Program

	Number	Deadweight tons
Steamers .....	305	1,126,050
Steamers (hulls only) .....	115	447,700
Steamers converted to barges .....	56	206,000
Steamers converted to sailers .....	8	30,500
Barges .....	28	71,000
Barges converted to schooners .....	2	4,000
Ocean tugs .....	13	.....
Harbor tugs .....	56	.....
Harbor tugs (hulls only) .....	6	.....
Actually built .....	589	1,885,250
Cancelled .....	428	1,166,950
Original program .....	1017	3,052,200

board its ships, the board has been carrying a payroll of 12,000 persons.

One of the new commissioners has stated his belief that 2500 employees could ably supervise the board's vessels, a statement that indicated close to 5000 unnecessary persons have been cashing government vouchers for cluttering up the board's ample offices.

High salaries for the responsible officers have been a sin of the shipping board in the past. The annual salary of \$15,000 was the top mark reached under the old board; under Chairman Lasker, as high as \$35,000 is reported to have been reached. J. Barstow Smull, one of the three new operating vice presidents of the Emergency Fleet corporation, is reputed to get that

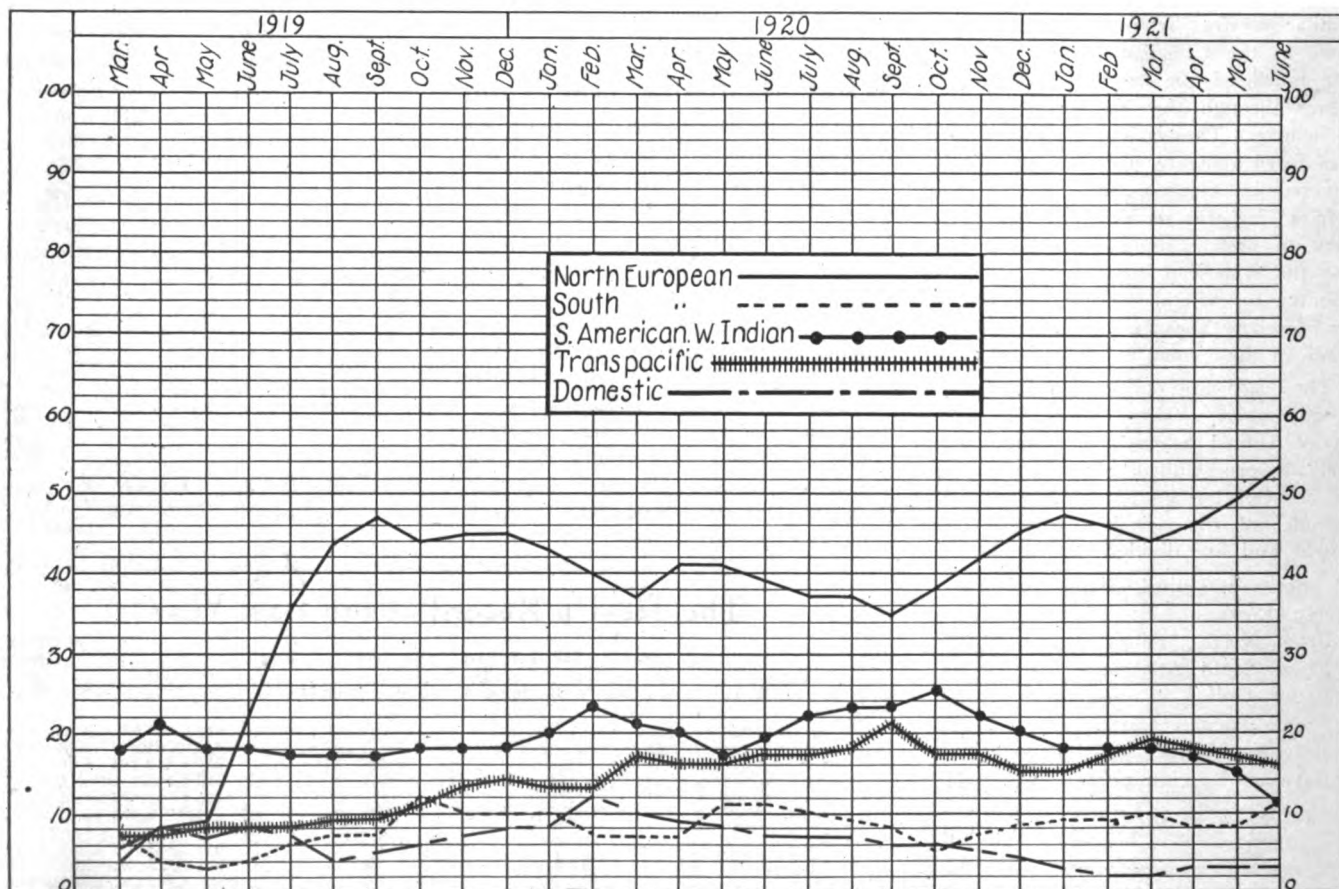
amount with William J. Love and Adolph J. Frey, his associates, drawing \$30,000. In the legal department as high as \$30,000 also is said to be the salary of various experienced lawyers recently added to the staff.

These higher salaries for a few experienced operators and lawyers is in line with Mr. Lasker's belief that much greater savings will result. His position is that experienced operators can cut down the terrific loss in operations which has piled up steadily in past months, while able lawyers are essential to save the government millions of dollars on the hundreds of millions of dollars in claims now awaiting settlement. His principle is that cheap men will prove more costly in the long run than high priced but experienced men.

## Only One Wooden Ship Is in Active Service

The few advocates of wooden ships who sent the government into that highly expensive and thoroughly wasteful gamble, can find the complete answer to their argument in the present status of this fleet.

Only one wooden ship out of the 290 still remaining in government



TRADE ROUTES IN WHICH SHIPPING BOARD VESSELS HAVE OPERATED. THE CHART SHOWS THE RELATIVE PERCENTAGE OF THE ENTIRE FLEET EMPLOYED IN EACH SERVICE

hands is in active service. The other 289 ships or 99.65 per cent of the fleet is laid up in American and European ports. The solitary vessel on the active list is under bareboat charter to the United States navy, so as far as commercial ship operators are concerned, the entire fleet is serving no purpose except that of calling attention to one of the best examples of war folly.

The up-to-date record of the wooden fleet is shown in the following table:

Wooden Vessels on June 30, 1921			
Laid up in:	Number of vessels	Deadweight tons	Per cent of fleet
Providence, R. I. ....	1	3,588	...
Claremont, Va. ....	259	952,131	...
Claremont, Va. (concrete) ..	2	6,500	...
Orange, Tex. ....	14	51,028	...
Seattle ....	1	3,665	...
Total in American ports	277	1,016,912	94.77
Laid up in:			
European ports ....	12	52,379	4.88
Total idle wooden fleet..	289	1,069,291	99.65
Active Wooden Fleet			
Bareboat charter to United States navy .....	1	3,870	0.35
Grand total .....	290	1,073,161	100.00

## Names Claims Board To Liquidate \$211,000,000

The question of claims against the shipping board as well as its claims against private firms has been one of the most important of all of the post-war problems. The old board, it is evident, weakened in numbers and ability by President Wilson's failure to keep its membership intact, and operating for many months as a 2-man body, was unable to find sufficient time for either of the two great questions of selling and operating the fleet, and of handling claims.

The importance of the claims question was early recognized by the new Harding board and it promptly requested release from the vexatious claims on the principle that the problem of getting the fleet into private owners' hands and at the same time checking the enormous wastage of money, was sufficient to require its full time.

President Harding coincided with this view and agreed to appoint a claims commission with power to handle claims and free the board for sole study of its greater problem. This decision won the hearty approval of all marine men who want prompt solution of the disturbing conditions under which many firms are necessarily in financial difficulties through failure of the board to settle promptly just claims. Many other firms are in financial difficulties owing to the unsound competition with federally owned ships operated without regard to business judgment.

After some weeks' delay, met as a result of the refusal of one of the

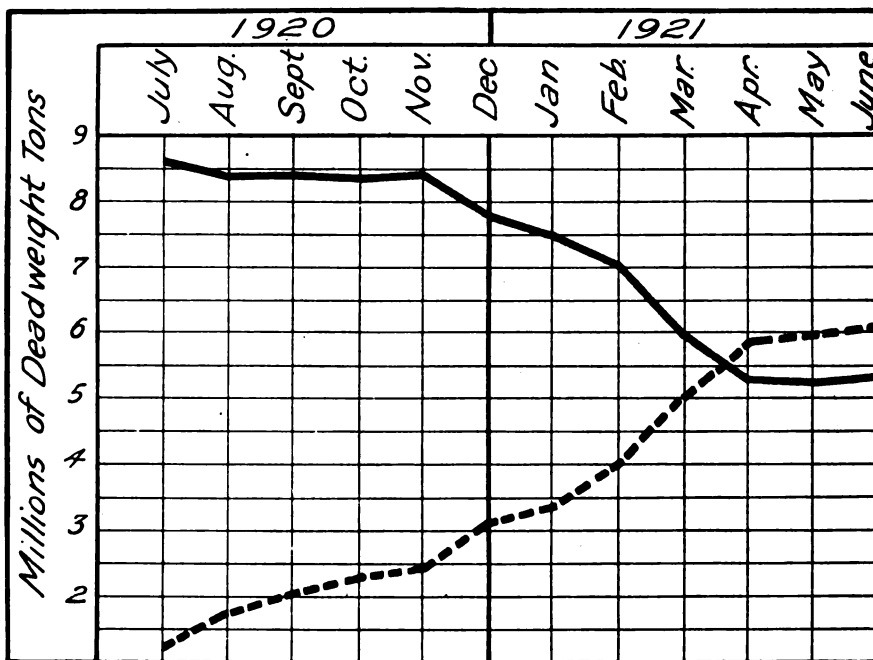
prospective members to accept the appointment—a refusal which President Harding succeeded finally in making over into an acceptance, the shipping board claims commission was named on July 22. This commission is to settle all unliquidated claims which the new shipping board inherited. The claims amount to \$211,000,000. The President has directed that these claims be settled "as speedily as expedition and fair judgment will permit, so that no unnecessary further hardship be worked on those having proper claims."

The chairman of the commission is Judge Walter D. Meals, former associate justice of the appellate court of Ohio. The associate members of the commission are: Homer Ferguson, presi-

Teele is vice president of the American Institute of Accountants.

Some appreciation of the difficulty of the work is gained from a report by one division of the board that in the past 12 months claims of \$1,247,938.13 were presented. Of these \$106,442.83 were referred to another division; \$549,544.98 were declined as based upon unsound legal principles or contrary to commercial custom and \$591,950.32 were held worthy of consideration. This latter class was settled for \$278,999.00, or less than one-half of the amount claimed.

With its great fleet, the ordinary operations run into large totals. Demurrage collections during the past year aggregated \$1,282,465.75 with an



HOW THE SHIPPING BOARD FLEET WAS EMPLOYED DURING THE LAST YEAR. THE SOLID LINE SHOWS THE ACTIVE FLEET IN OPERATION EACH MONTH, THE DOTTED LINE SHOWING THE INACTIVE FLEET. MORE TONNAGE HAS BEEN IDLE THAN ACTIVE SINCE APRIL

dent of the Newport News Shipbuilding & Dry Dock Co., Newport News Va.; F. W. Wood, former president of the Maryland Steel Co., Sparrows Point, Mr.; Capt. Richard M. Watt, construction corps, United States navy; Arthur W. Teele of the accountant firm of Patterson, Teele & Dennis, New York. The secretary of the commission is O. P. M. Brown.

Judge Meals has been well known to the President for many years and was selected as chairman because of his great legal ability. Mr. Ferguson stands among the first American shipbuilders. Mr. Wood has had long years of experience in shipbuilding and has made a record that is nationally known. Captain Watt was formerly chief constructor of the navy. Mr.

additional \$1,425,789.78 put in counsel's hands for collection. Cancelled charter parties and breaches of contract piled up claims by the board for \$402,828.58. In checking over records of performances of vessels on trial trips, the board found and obtained a forfeiture of \$150,000 for failure of six ships to make contract speed.

## Fewer Firms Operate Ship Board Tonnage

The number of firms operating or managing shipping board tonnage has declined sharply from the peak figure of 18 months ago. At the present time, only 76 companies are actively operating general cargo and bulk steamers for the board; 7 additional firms are hand-



ling tugs and 3 more operate tank steamers only. The total number of operators is 86. An almost equal number have been eliminated in recent months, information being that 80 companies have either given up or have been asked to give up their connection with the board's fleet.

### New Pier Contracts Save Money for Board

The shipping board points to sharp reductions made in the amount paid for pier accommodations at New York. New contracts drawn have brought about a cut of \$55 per ship per day as against charges prevailing a year ago. Progressive reductions have been obtained as shown in the following schedule:

Date	No. of ships	Approx. total daily charges	Approx. daily average per ship	Approx. annual total
Oct. 4, 1920..	79	\$15,350	\$194.00	\$5,602,750
Nov. 11, 1920..	72	13,775	191.00	5,027,875
Jan. 17, 1920..	60	9,900	165.00	3,613,500
June 22, 1921..	49	6,451	131.65	2,354,615
June 25, 1921..	51	7,095	139.10	2,589,675
June 28, 1921..	45	6,278	139.50	2,291,470

The board estimates this reduction in pier charges builds up a total daily

saving of \$2750, on the basis of 50 vessels on the active list, or at the rate of \$1,000,000 annually.

Government owned piers in New York, taken over from the German companies during the war and turned over to the shipping board by the war department, are Piers 2 and 3 at Hoboken, N. J. Also the board operates Pier 3, army base, Brooklyn. The Cosmopolitan Shipping Co. leases Pier 2 Hoboken for \$15,000 per month and Pier 3 is operated by the Munson lines for shipping board vessels in South American service. The pier is carried on a rental basis of \$16,725 a month.

### Classifies Ships as to Time of Repairs

In handling the idle fleet, the shipping board has worked out three classifications based upon the condition of the ship and the time required to return the vessel to service. A Class A ship is one which can be prepared for service in three days; a Class B ship requires medium voyage repairs and can be made ready in 10 days; a Class C

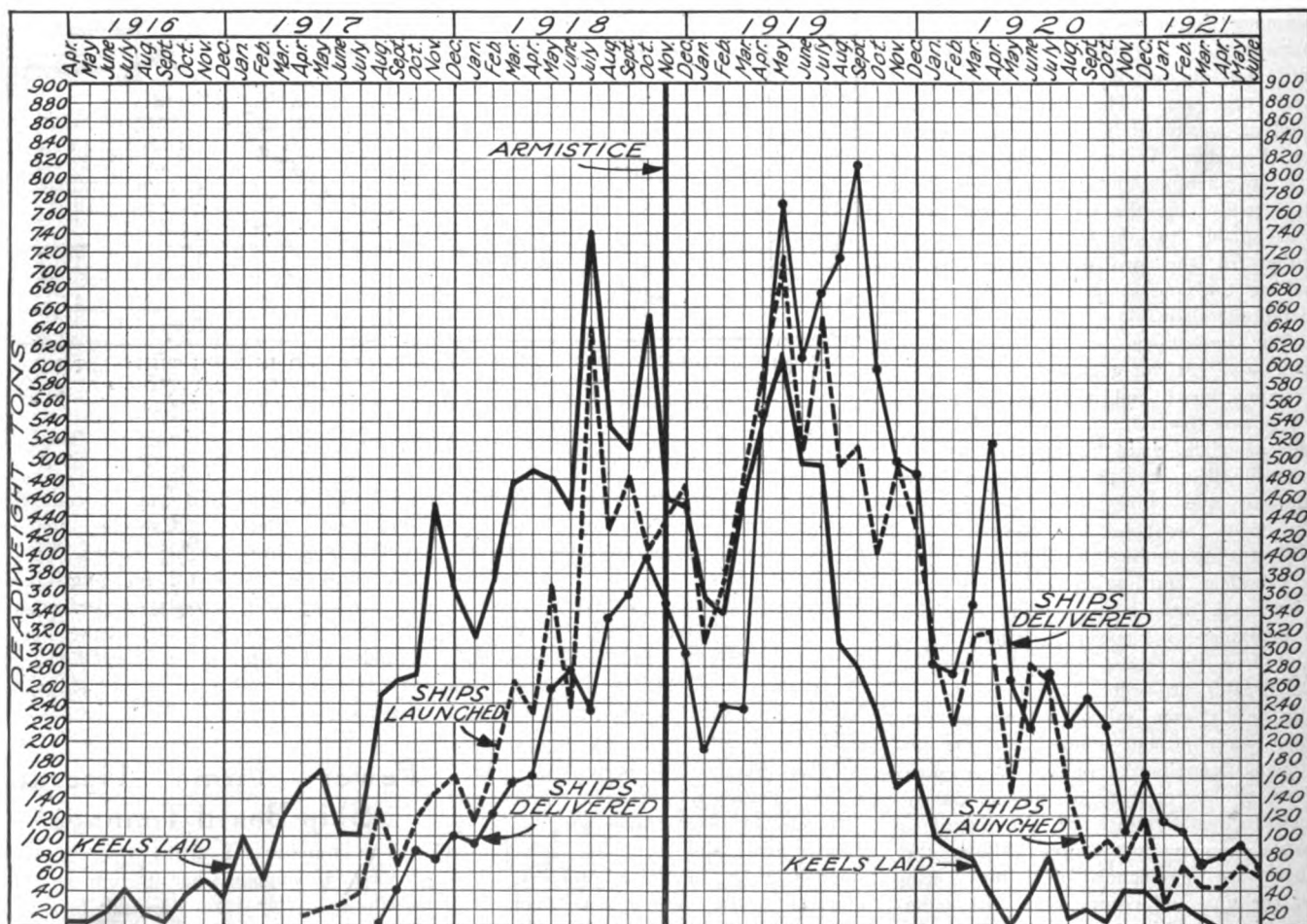
ship requires a thorough or general overhauling and can not be made ready for service in less than 30 days.

The vessels are cursorily inspected when first laid up and after reaching her point of anchorage is given a thorough survey.

### 72 Per Cent of Fleet Can Burn Oil

In dividing its ships between coal and oil burners, the shipping board has greatly favored the oil burning type. Of the cargo vessels now being operated by the board, 80 per cent are oil burners. As an offset, in recent months, a number of coal burners have replaced oil burners in the transatlantic and Mediterranean services.

The following table shows the proportion of oil and coal burners in the complete program and discloses that 41 per cent of the tonnage is purely oil burners, 28 per cent coal burners with 31 per cent adapted for burning either coal or oil. In this table, 223,400 deadweight tons of oil burners and 53,400 deadweight tons of combination



COMPLETE RECORD OF THE CONSTRUCTION WORK OF THE SHIPPING BOARD, SHOWING MONTH BY MONTH THE STORY OF THE KEELS LAID, SHIPS LAUNCHED AND SHIPS DELIVERED. THE HEAVY VERTICAL BLACK LINE MARKS THE ARMISTICE, THE LEFT HALF OF THE CHART THUS SHOWING WORK DONE DURING THE WAR, THE RIGHT HALF SHOWING THE SHIP CONSTRUCTION WHICH HAS BEEN CARRIED ON IN THE 31 MONTHS SINCE THE WAR ENDED

coal and oil burners, which have not yet been delivered, are included:

Division of Tonnage as Oil, Oil or Coal and Coal Burners			
	Per cent	Deadweight tons	Oil burners Deadweight tons
Oils .....	41	5,303,120	5,303,120
Coal .....	28	3,610,338	
Oil or coal.....	31	3,941,853	3,941,853
Total .....	100	12,855,311*	9,244,973
*Sailers, barges, etc., not included.			

The following table shows the tanker program, 6 out of 138 ships being still undelivered:

#### STEEL TANK STEAMERS

Active program	Requisitioned	Contract	Total
Number of ships...	53	85	138
Tons .....	519,030	844,000	1,363,030
Delivered			
Number of ships...	53	79	132
Tons .....	519,030	783,600	1,302,630
To be delivered			
Number of ships...	..	6	6
Tons .....	..	60,400	60,400

Bunkering stations for its ships have been established by the board at Bizerta (North Africa), Brest (France), Rio de Janeiro (Brazil), St. Thomas (West Indies), Iquique (Chile), Honolulu (Hawaii), Manila (Philippines), Shang-

### Board's Ships Assigned in June 1921

Trades	No. vessels	D.W.T.	Per cent
Army .....	3	27,172	0.57
Navy .....	1	12,674	0.27
Total .....	4	39,846	0.84
Northern Europe:			
Scandinavia .....	24	140,277	2.94
Baltic .....	22	139,301	2.88
United Kingdom.....	135	1,074,476	22.52
North Sea .....	113	907,439	19.02
Atlantic .....	32	252,741	5.30
Iceland .....	1	5,143	0.11
Total .....	327	2,517,377	52.77
Southern Europe:			
Mediterranean .....	42	347,551	7.29
Black Sea .....	9	54,793	1.15
Mediterranean Service .....	14	89,382	1.87
Total .....	65	491,726	10.31
Africa:			
North, east and south coast .....	6	49,203	1.03
West coast .....	13	105,878	2.22
Total .....	19	155,081	3.25
British India .....	6	66,062	1.38
East India .....	8	69,165	1.45
Australian .....	13	112,452	2.36
East Asian .....	9	88,348	1.85
Orient .....	49	456,171	9.56
Total .....	85	792,198	16.60
South America:			
East coast .....	36	270,703	5.67
West Coast .....	13	70,092	1.47
Total .....	49	340,795	7.14
West Indies .....	33	129,119	2.70
Mexico and Central America:			
(Caribbean and Gulf) .....	5	18,928	0.40
Foreign service .....	28	152,741	3.20
Domestic:			
Coastwise .....	15	58,298	1.22
New England coal..	1	5,486	0.12
Intercoastal .....	8	69,090	1.45
Total .....	24	132,874	2.79
(a) Grand total.....	639	4,770,685	
(a) Does not include:			
Unallocated vessels.....	993	5,585,303	
Vessels chartered to independent companies.....	10	78,230	
Tankers .....	97	885,164	
In shipping board custody as mortgagee .....	1	4,286	
Total .....	1101	6,552,983	
Grand total.....	1740	11,323,668	

### Flags of Seized Ships

Nationality	Number	Deadweight tons
American .....	185	1,534,111
British .....	163	988,980
French .....	34	234,270
Norwegian .....	38	249,145
Italian .....	4	29,200
Danish .....	4	15,200
Russian .....	2	14,600
Japanese .....	1	8,800
Total .....	431	3,074,306

hai (China), Ponta del Gada (Azores), Bermuda and the Panama canal. Additional stations, it has been announced, are planned for Colombo (Ceylon), Sydney (Australia), Pago Pago (Samoa), Durban (Natal) and on the west coast of Africa, probably at St. Vincent (Cape Verde Islands).

### Business Mens' Help Augurs Success

**CHAIRMAN** Lasker of the shipping board has thrown overboard any possibility of avoiding blame in case the board falls down in its work. He commented on the consent of five or six of the most successful marine men in the country to take up responsible work with the board by stating that this "is the best evidence that we can get the best brains of the country into the operation of the shipping board; and the shipping board can not excuse itself for failure, if it does fail, on the ground that it can not get around it the highest type of men able to do the work. If we fall down in that direction it will be our own fault."

### Status of Construction Program June 30

The long drawn out construction plans of the shipping board were giving evidence of approaching completion by July 1, last.

On the basis of keel laying, the program was 100 per cent complete, 2312 out of 2312.

On the basis of launchings, the program was 99.82 per cent complete, 2308 out of 2312.

On the basis of deliveries, the program was 98.96 per cent complete, 2228 out of 2312.

Of the 24 ships undelivered on July 1, all but one are scheduled for delivery in the closing months of this year. One of the combination passenger and cargo ships will not be delivered until March 1, 1922.

Exact record of the board's ship construction work with regard to keel

layings, launchings and deliveries up to June 30, 1921, by class of construction is shown in the following table:

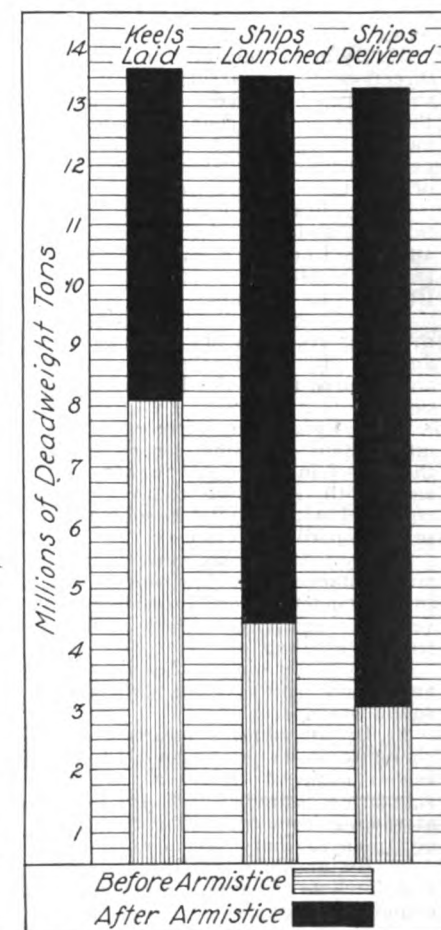
	Keel layings No. of ships	Deadweight tons
Contract steel .....	1,309	8,927,695
Requisitioned steel.....	384	2,687,266
Composite .....	18	63,000
Wood .....	589	1,885,250
Concrete .....	12	73,500
Total .....	2,312	13,636,711

	Launchings No. of ships	Deadweight tons
Contract steel .....	1,305	8,879,695
Requisitioned steel.....	384	2,687,266
Composite .....	18	63,000
Wood .....	589	1,885,250
Concrete .....	12	73,500
Total .....	2,308	13,588,711

	Deliveries No. of ships	Deadweight tons
Contract steel .....	1,285	8,650,895
Requisitioned steel.....	384	2,687,266
Composite .....	18	63,000
Wood .....	589	1,885,250
Concrete .....	12	73,500
Total .....	2,288	13,359,911

Ship deliveries during the various fiscal years of the shipping board's activities are shown in the following table:

Year	No. of ships	Deadweight tons
1917-18 .....	214	1,374,496
1918-19 .....	854	4,553,298
1919-20 .....	1,002	5,694,567
1920-21 .....	218	1,737,550
Total .....	2,288	13,359,911



GRAPHIC RECORD UP TO JUNE 30, 1921, OF GOVERNMENT'S SHIPBUILDING WORK BEFORE AND AFTER THE ARMISTICE

# Safeguards Navigation by Sound

Development of Hydrophone During World War Is  
Distinct Aid to Peace-Time Marine Operation

BY DR. H. C. HAYES

Sound Aide, U. S. N.

ONE of the most fortunate circumstances resulting from the amount of research undertaken during the late war for military purposes is that some of the devices so evolved have an important application to peace-time navigation. Of such devices, one in particular has proven to be a powerful aid and safeguard to navigation at all times and especially during conditions of low visibility. This device is the so-called "MV hydrophone" developed by the United States navy. Numerous tests carried out by the navy during the past two years have demonstrated this device can serve the navigator in the following ways:

1. By hearing and locating the direction of a moving propeller-driven vessel at ranges varying from 1 to 5 miles, depending upon the amount of noise which the vessel makes and providing the depth of water is within 100 fathoms.

2. By accurately determining the direction of submarine sound signals, located at fixed points along the coast or at harbor entrances, at various ranges up to 30 miles, depending upon the amount of local or water noises present.

3. By hearing, giving the direction of, and giving the course of any vessel equipped with a suitable submarine sound signal at ranges from 10 to 30 miles.

4. By giving a continuous sounding record while underway at any speed for depths less than about three times the length of the vessel.

5. By giving a fairly accurate, intermittent sounding record while the vessel is underway in water of any depth, providing the vessel is equipped with a suitable submarine sound-signalling device.

6. By determining the bearing and distance to submarine ledges and precipitous coasts providing the vessel is equipped with a suitable sound-signalling device.

7. By determining the direction and range of certain submarine sound beacons.

8. By affording a means of exchanging code messages between vessels equipped with a suitable submarine sound-signalling device at ranges from 5 to 30 miles, thus giving an auxiliary to the radio.

9. By possible locating icebergs and derelicts at ranges sufficient for avoiding collisions.

The impression that one, who is unfamiliar with the recent developments in submarine sound detection, must receive from reading the above sum-

## Submarine Acoustics

*THIS is the first of a series of three articles explaining the hydrophone, an instrument brought out in the world war for detection of submarine sounds. The author, Dr. H. C. Hayes, is physicist and sound aide in research on submarine acoustics at the engineering experiment station, United States naval academy, Annapolis, Md. The next article will describe the MV hydrophone and show how the sound response from a large number of receivers can be brought into phase through the principle of compensation so as to give a highly selective sound-receiving device and at the same time make possible the accurate determination of direction by utilizing the binaural principle. The third and final article will explain how the MV hydrophone can be employed to safeguard navigation in the various ways outlined in the accompanying summary.*

mary must be similar to that received from reading the advertisement of certain patent medicines which claim to cure all ailments to which humanity is subject. It will be seen, however, that there is nothing remarkable about the fact that the MV hydrophone proves an efficient remedy for so many and apparently unrelated "navigational ills." Any device that is capable of detecting a comparatively faint submarine sound in the midst of the numerous local disturbing noises always encountered in a greater or less degree when attempting to listen from a moving vessel can do most of the things claimed for this device. The only remarkable thing about the MV hydrophone is the fact that the need for such a device for navigational purposes did not lead to its development years ago.

The MV hydrophone determines the direction of a sound by means of the so-called "binaural sense." It succeeds in bringing that sense into play by the use of the so-called "principle of compensation." It has the ability to intensify the sound from any desired direction and at the same time weaken the intensity of all sounds from other directions. This ability is usually

spoken of as its "selectivity" or "focusing ability."

Experiment proves the direction of a sound cannot be judged with any degree of accuracy by using one ear alone, that is, monaurally, unless the pitch of the sound is very high; but that the direction of any audible sound can be judged with considerable accuracy by using both ears, that is, binaurally, and that the accuracy proves to be greatest when the direction of the sound is perpendicular to a straight line joining the two ears.

The determination of direction when both ears are used (by means of the binaural sense) depends largely on the difference in time between the reception at the two ears of corresponding impulses of the sound. Since this time difference does not depend in any way upon the intensity of the sound at either ear, it follows that a person partially deaf in one or both ears can determine the direction of a sound nearly, if not quite, as accurately as one with normal ears. When a sound reaches the two ears at the same time, the listener judges the sound to come from a direction perpendicular to the line joining his two ears. If the sound source is to the listener's right, the sound strikes his right ear first and he judges the sound to come from his right, the apparent direction depending upon how much earlier the sound strikes his right ear. The operation of the "binaural sense" is always such that a sound is judged as coming from the right or left, depending upon whether it reaches the right or left ear first, respectively.

It is evident that the difference in time of reception of a sound at the two ears varies most rapidly as the head is turned from a direction such that the sound approaches normal to the line joining the two ears, and for this reason the direction of a sound can be judged with greatest accuracy when it is normal to this line.

The instinct of every animal upon hearing a sound is to turn his head until the line joining his two ears is perpendicular to the direction of the sound. This instinct is doubtless due to the fact that he determines the direction most accurately when his head is turned to this position and not because his eyes are so located that



for this position of his head the object producing the sound will be brought into his best field of vision. The relative location of the eyes with respect to the two ears, brought about through the processes of evolution, has apparently been determined by the fact that the sense of direction, the binaural sense, is most acute for directions perpendicular to the line joining the two ears.

It also is to be noticed that, other things being equal, the accuracy of the binaural sense is proportional to the distance between the two ears. A person or animal having the two ears widely spaced has an advantage, so far as the determination of direction is concerned, over his "narrow minded" brethren. It will be noted later that the MV hydrophone takes advantage of this fact.

Although the binaural principle has been recognized for a number of years, its high state of development in human beings and many animals has not been recognized. The high state of development of this sense may be appreciated from the fact that the average person, in judging the direction of a sound determines the time difference between reception of the sound at his two ears to within a hundred-thousandth of a second and a trained listener probably determines this time difference to within five-millionths of a second.

The binaural sense, then, is a sense of direction of sounds brought about by the difference in time of reception of the sound at the two ears. This sense, which is continually operating, and upon which our safety in a large measure depends, has been developed through the processes of evolution to an extremely high degree of perfection.

Any sound-detecting device that determines direction through the operation of this sense is said to operate on the "binaural principle". The MV hydrophone makes use of the "binaural principle" for the determination of direction.

#### Compensating the Differences

The ears have certain advantages over other types of sound detecting devices, the chief one of which is they are readily portable. As a result, they operate conveniently on the binaural principle because with a minimum of effort they can be brought into such a position with respect to a sound that the direction of the sound will be normal to the line joining them, this being the position where the sound appears to be "binaurally centered", that is, does not appear to be either to the right or to the left, and where direction is determined with greatest accuracy.

Neglecting the possible effect on the

listener's features, one can conceive of ways other than by turning his head whereby he could binaurally center a sound and thereby determine its direction. If we remember that a sound is binaurally centered when the impression of the sound entering the two ears registers simultaneously on the listener's brain, then, instead of turning the head until this condition is reached, one can conceive of an individual having ears that can move in or out from their normal position. Suppose such an individual heard a sound somewhere to his right. If his binaural sense were normal, this would imply that the sound reached his right ear first, or, more particularly, that the sound entering his right ear registered first on his brain. Now, without turning his head, he could cause the sound impression at both ears to register simultaneously by delaying the time of transit of the sound from the outer ear to the brain in case of the right ear, or by decreasing the time of transit in case of the left ear, or by causing such variations to operate by a definite and proper amount in both ears simultaneously.

This effect could be brought about by extending the right ear and withdrawing the left ear a proper amount from their normal position, or by leaving both ears in their normal position and imposing a proper amount of time lag and acceleration upon the nerve transmitting mechanism of the right and left ear respectively. In either case the process of binaurally centering the sound without moving the receivers would be called "compensation".

Compensation, then is the process of mechanically producing at will a variation in the relative time of arrival of sound impulses at the two ears in such a manner and by such an amount that the impulses register simultaneously, giving the listener the impression the sound is neither to his right nor his left.

The design of the MV hydrophone is such that the process of compensation can be employed to binaurally center a sound from any direction, enabling the listener to determine its direction. The particular part of the device used for varying the relative time of arrival of sound to the two ears is termed a "compensator".

As a sound detecting device, the ear has at times certain disadvantages, the chief one of which is it is nonfocusing, or non-selective. It receives sound from all directions with equal intensity. Ofttimes it would be a convenience if the ears could be focused to receive sound from a definite direction and at the same time made insensitive to sounds from other directions. Under such conditions, it would be possible

to follow the conversation of any one individual in a gathering of people, all of whom are conversing.

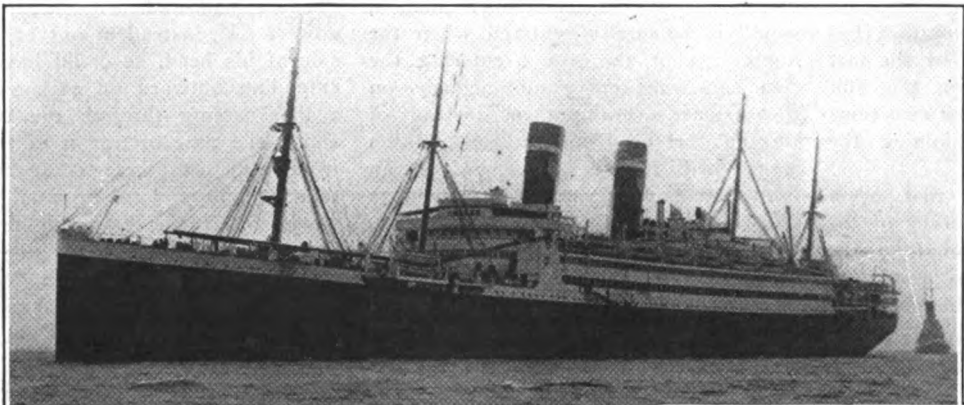
One can readily conceive of an individual endowed with such hearing powers. If, instead of one ear on each side of his head, he could have several extending outward on each side along a line passing through the two ears, and if the time of transit of the sound from each ear were compensated so that the impressions from all the ears would reach the brain simultaneously for sound approaching the line of receivers or ears from some definite direction, then he could hear sensitively any sounds approaching from this direction, since the impressions from all ears would arrive in phase and therefore add, while sounds from any other direction would not be distinctly heard, due to the fact that the responses from the different ears would arrive out of phase and would then tend to cancel one another through the process of wave interference.

The MV hydrophone is a sound-receiving device employing a number of receivers and carrying a compensating device such that the sound responses from all the receivers can be made to reach the listener's ears in phase for sound approaching from any direction. This results in giving the device a high degree of selectivity, that is, the ability to hear sensitively sound from any desired direction and at the same time insensitively sound from every other direction.

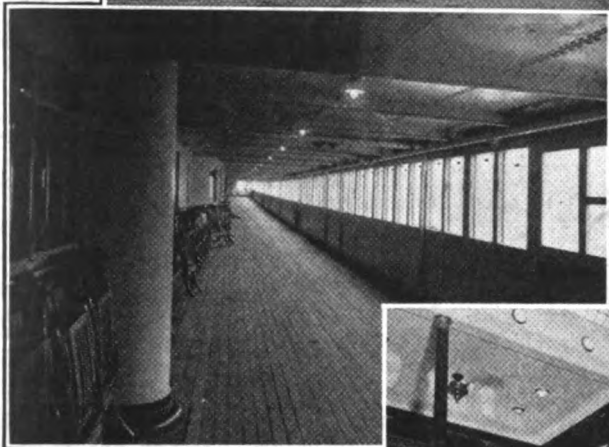
## Houston Would Enlarge Terminal Facilities

The harbor board of Houston, Tex. has recommended a bond issue of \$1,250,000 to be used in the construction of additional terminal facilities at the turning basin of the Houston ship channel. The Houston mayor and commissioners are known to favor this bond issue and it will be submitted to the voters at an early date. The harbor board also ask permission to borrow \$180,000 from local banks to make additional improvements on certain docks. It is declared these handle three times as much cotton as improvements will enable the port to previously and will also increase the revenue 25 per cent. The commissioners adopted resolutions endorsing this proposition of the harbor board. One of the most important improvements recommended by the harbor board is the construction of additional links and other trackage of the municipal belt railway, which serves most of the industries on the Houston ship channel.

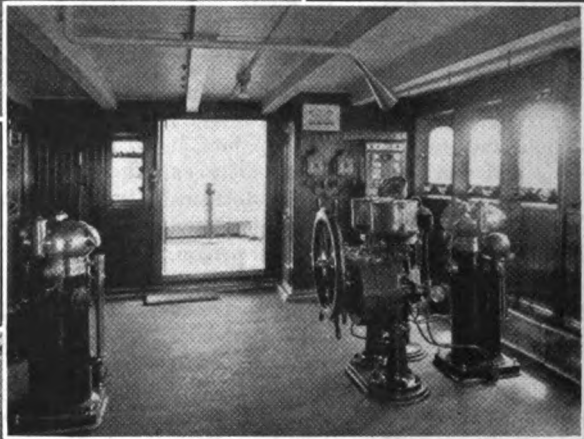
# A Photographic Description of the



These official photographs of the George Washington afford a good idea of the superb appearance of the ship, the largest in active service under the American flag.



Promenade deck



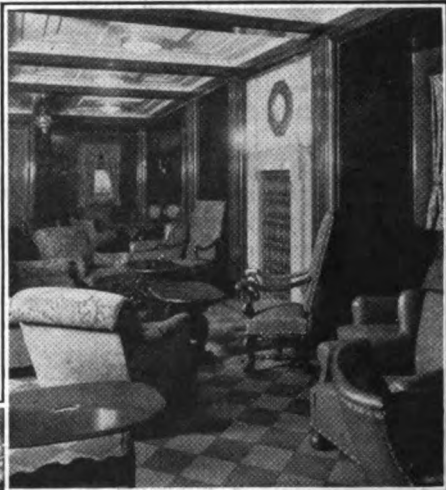
Navigating bridge



The stairway in the Smoking Room



Social hall, looking toward stern



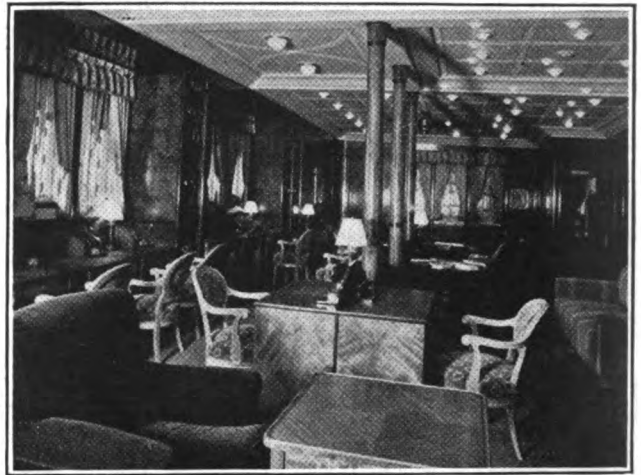
Another luxuriously appointed smoking room



Gallery smoking room

# American Liner George Washington

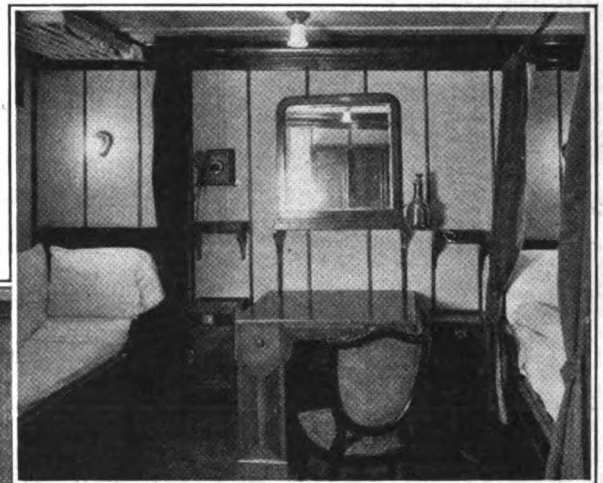
The U. S. Mail line's George Washington, which was used as a troop ship during the war has been completely reconditioned, and is one of the finest passenger ships afloat. She sails from New York for Plymouth, Cherbourg and Bremen



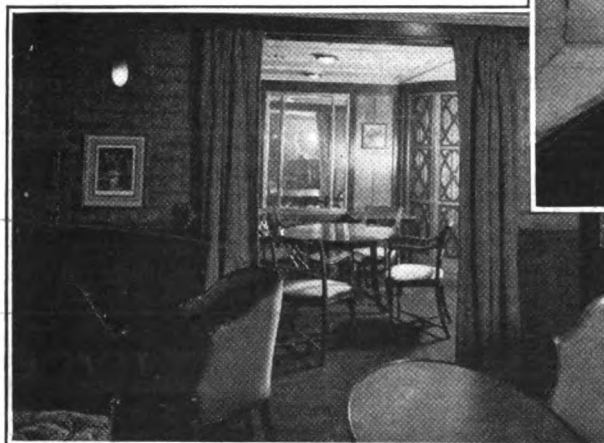
Library and writing room



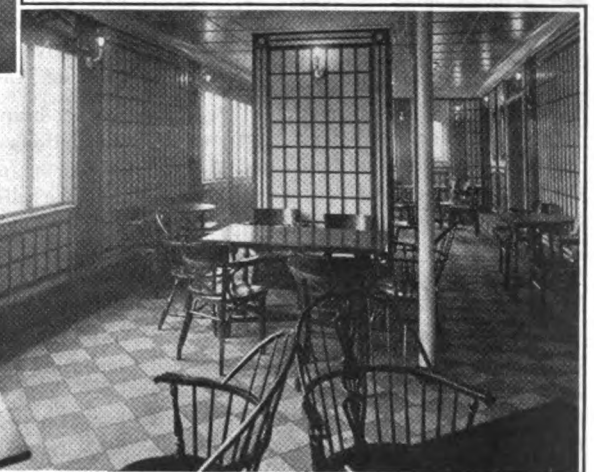
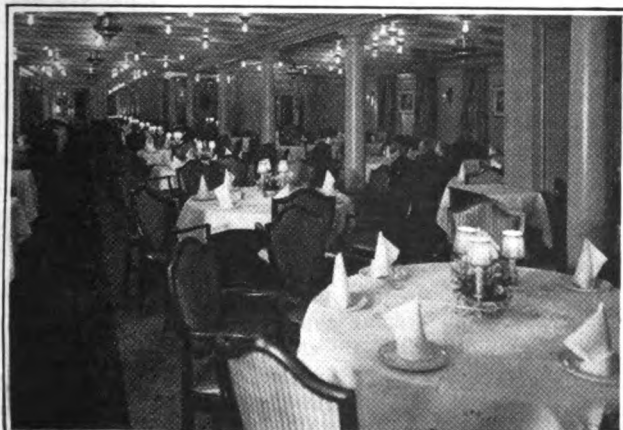
Second-class lounge



Two-berth stateroom



View in a beautifully decorated suite



Veranda cafe

Dining room

# Practical U. S. Ship Problems-V

Efficiency in Operation, Management and Type of Vessels Are Essential in Successful Maritime Ventures

BY ROBERT EDWARDS ANNIN

**I**N RELATION to the problem of the American merchant marine, and in view of the competition which it must meet, efficiency in three directions is most essential if the United States hopes to win a place among the leading sea carriers. The three may be called operation, management, and type.

As to operation it will be useful to take the results of an actual voyage account so the relative importance of the main items may be approximately borne in mind. The following shows percentages of expense for the voyage of a 10,000-ton ship out with cargo and home in ballast under the old pay scale; and costs of 1920 for both subsistence and stores:

Operating Expense		
Wages and subsistence per cent	17.4	
Fuel oil, per cent	48.7	
Stores (deck and engine) per cent	3.3	69.4
Voyage Expense		
Loading and discharging cargo per cent	17.4	
Buying, loading and discharging ballast per cent	6.6	
Port charges and sundries per cent	6.6	30.6
Total per cent		100.0

Under present conditions the cost of these items would be about 20 per cent less, making operating expenses, proper, about 66.4 per cent and fuel 44 per cent of the whole. Under the revised scale of American wages now in effect, and allowing for 15 per cent reduction in deck officers pay now impending, the pay rolls of an American and British ship of about 8000 tons deadweight capacity will compare about as follows, with sterling at \$3.75:

American ship	\$4,528.32 per month
British ship	2,314.00 per month

In other words American wages under the present shipping board scale are likely to be nearly double those of the British competitor. The difference in subsistence is more difficult to arrive at, but will not be less than 20 per cent in favor of the English ship.

Two facts should be considered in this connection. A large part of the present differences is due to the depreciation of foreign currencies, and with the gradual return to a gold basis whatever disadvantage we have from this cause will disappear. The return of England to gold payments would, if the present scale continued, automatically raise English wages 30 per

cent as compared with ours. This will not help any in reducing present handicaps, but is highly important in any broad view of the future. Again the American scale has not been accepted by private owners who declare that they can not pay such wages. It is likely that whenever the present arrangements expire there must be another drastic reduction.

## In Better Position on Fuel

Recent events make it probable that America shall be on a better relative fuel basis than ever before—for coal almost certainly, and as to fuel oil for at least some years to come. To realize the importance of this it is only necessary to bear in mind the enormous per cent of operating costs chargeable to this item. The cost of subsistence could also be decreased without injustice to the personnel. It may be expected that the disadvantages in these respects will gradually diminish, until America is at least on a better relative basis than in 1913.

American ships are financially handicapped by laws prescribing the treatment of seamen. They must give a certain minimum housing space to the crew, which reduces earning space. They must provide a larger personnel than the British, and must not demand overtime except in special contingencies. They must not employ more than a given percentage of sailors unable to speak English; and all officers must be American citizens. The matter of advances on account of wages is regulated by law, and not by the discretion of the master.

The humanity of these and similar restrictions need not be discussed. The effect on operation is undoubtedly to increase disadvantages already serious enough. The influence of some of these provisions upon discipline is disastrous, causing drunkenness, desertion, delay, etc.

The item governing the employment of officers and men is particularly hampering. Owing to the sudden expansion of the merchant fleet and the resultant infusion of raw recruits, the average experience and skill of American sailors in all grades is distinctly inferior to those of several nations whose sea activities and tradition have been continuous. Give Ameri-

cans a generation of experience and training and they will equal their rivals in this respect, or surpass them as they have done before. But at present all departments, and especially the engine room, suffer from this cause. It takes time to turn a farmer or mechanic into a real sailor. One must have operated ships to realize the enormous effect of this upon the expense account of a steamer, when a day's delay means the loss of hundreds or thousands of dollars. Quick turn-around is the key of success in operation. The responsibility for readiness, loading and discharging, and all shore provisions for expedition belong to management. But no management can accomplish a quick turn-around if the ship's operation be hampered by inefficient or insubordinate crews or officers who cause slowing down or stoppage at sea, or hold her idle in port.

As to management, the quality of this determines the efficiency of the shore work, which includes an infinite amount of detail, from the selection of employment, and fixing of rates, to the signing on of officers and men and purchases of stores. The details of a ship's management are never completed as long as she remains in commission. While she is performing one voyage, the accounts of that voyage always require attention, foreign agents must be advised and watched, disputes settled and her next business arranged.

This work only can be done properly by experienced agencies, trained in the complexities of the business. Agents must be in close touch with hourly changing markets and clothed with power to act instantly in the case of sudden crisis or opportunity. The whole routine must be organized with three main objects in view—revenue, economy of expense, and economy of time. These are the whole science of ship management. The freight market is beyond human control. It is made by an infinite number of obscure and often unpredictable and imponderable factors. The best management can only secure such net results as market conditions permit. But zealous guarding of owners' interests in the vital matters of keeping expense and delay at the minimum are always both possible and imperative in good markets and bad. In the former they increase profits, and in the latter they reduce losses in periods



of depression, to which the business is peculiarly liable.

No non-operating owner can hope for anything but loss, save perhaps in war time, unless he entrusts his ships only to managers of experience and integrity and gives them all necessary authority to act without hesitation or delay.

Efficiency of type is fundamental. Unless a ship is suitable for the trade in which she is to be used, the best economy in operation, and the most experienced and diligent management can obtain only a poor result. And this means that, whenever rivalry is keen, and rates closely cut, the poorer types must inevitably give way in the process of economic selection.

### Wooden Ships Were Failures

An extreme example of selective extinction of this kind may be seen in the war-built wooden steamers now laid up all along the shore. Without reviving the controversy which preceded the adoption of the "wooden-ship" program; admitting for the sake of argument, the decision to build, as a war expedient, was wise, the commercial unsuitability of this type was demonstrated by its quick disappearance even while steel steamers of a poor class were still making large profits.

The wooden hulls had about every commercial fault that a ship can possess. They were of uneconomical size, say about 3500 tons, and of their deadweight capacity nearly 30 per cent was used for fuel and stores. Hence their cargo capacity was relatively small and their operating cost, per cargo ton, high. With low speed and a relatively high fuel consumption it would not have required a very hard fought market to put them out of business, even though they had been "strong and staunch". But they were neither. They were built mostly of unseasoned timber and planking which would not stand still after it was in frame, and their seams could throw oakum nearly as fast as they could be calked. Consequently they were leaky and having been built in great haste, by labor often contemptuously described as "cow-shed carpenters", they had inherent structural weaknesses which the thrust of powerful engines designed for steel hulls did not help at all. This resulted in enormous repair bills, enhanced insurance, and great loss of time. Some of these ships were idle for repairs, etc., fully half the time. They were a fine example of how a vicious plan and poor construction may make a ship commercially worthless.

Expert selection of plans; low consumption, relative to speed and capacity; large cubic capacity and low repair

costs, which mean thorough and skillful builders, these are the first requisites of an economical and competitive ship.

It is the experience of the last few years that for ordinary all round cargo steamers, the reciprocating engine, with Scotch boilers, and in a model which can achieve 10 knots under average conditions on a consumption of about  $3\frac{1}{2}$  tons of oil or 5 tons of coal per 1000 tons per day, is a good competitive proposition. For size, 5000 to 6000 tons cargo capacity will be more economical to operate than smaller sizes; and easier to provide with employment than the larger types, say 7500 to 10,000 tons.

For ships of this type neither the turbine engine nor the water-tube boiler have been satisfactory. The old type of engine is more familiar to the average engineer while the turbine, a more delicate machine, requires a specially trained engine room staff which is not always obtainable. As the regular lines get the preference from either deck or engine room officers, and are constantly recruiting the best men from the tramp service, the personnel of the latter is rather migratory and the upbuilding of a trained force by selection and promotion becomes very difficult. Consequently, the lines tend toward greater efficiency in this respect, while the irregular service, as a whole, remains at a constant disadvantage when equipped with mechanisms which require a picked personnel.

### Will Get Best Results

Since, then, the tramp owner or agent must merely do the best he can under these unfavorable conditions, the motive power most familiar to the average officer and most nearly "fool-proof" is apt to attain the best results. So far as the engine is concerned the reciprocating type comes nearest to this description. As to boilers, a competent engineer remarks that while a water tube boiler will produce 8 to 12 kilograms of steam per square meter of heating surface, the Scotch boiler can produce from 25 to 35 kilograms per square meter with practically the same amount of fuel. The greater speed in raising steam with the tubular type of boiler is fully offset, under tramp conditions, by the greater care required, greater liability to steam leakage and rapid deterioration under neglect. Whatever the causes, most operators will assert from experience that the reciprocating, Scotch boiler type is the one to select for the catch-as-catch-can business of the ordinary irregular freighter.

Briefly summarizing these conclusions America, if she is to compete in the

general foreign carrying trade, must get rid of the deadwood in her present fleet, reduce the active units to the needs of the market and place them under the care of experienced and economical operators clothed with authority to meet competition amid conditions changing always daily and often hourly. The latter is essential. Bureaucratic machinery is too cumbrous and dilatory to compete with the spur of selfish interest in a worldwide competition. This is irrespective of personnel. The best care and attention of the best men cannot beat a locomotive with an ox-team.

In addition our maritime laws should be so revised as to relieve us of artificial restrictions which now accentuate the inherent disadvantages.

### Tariff Will Be a Factor

The impending tariff legislation will have a possibly decisive influence on the future of our carrying trade. To broadly discuss the relative merits of high or low tariff, in the past, in the present, or under the developing conditions of the future, is not within the scope of this paper, but so far as shipping is concerned, it would surely be absurd to maintain a fleet of carriers and then enact statutes which would reduce their employment to a minimum. Since the profitable operation of ships is dependent upon the carriage of cargoes inward and outward, it is obvious that tax laws framed to exclude imports may preclude the profitable operation of our merchant fleet. Concerning the relative merits of "free trade" and "protection" upon our general prosperity there have been three generations of controversy and the end is not yet. But concerning the influence of high protection upon foreign trade there can be no legitimate controversy at all. The history of that trade is conclusive on this point.

Germany, a highly protected country, "went after" England's trade with government aid, subsidies, discriminating rates, and every commercial weapon at her command. But she made no secret of the fact that she needed a victorious war to achieve lasting success.

It is often assumed, and sometimes definitely asserted that England's foreign trade is the result of her merchant fleet. There could be no greater fallacy. Her fleet is the result of her trade. For 70 years she has had ports open to the products of the world, which provided her homeward cargoes, and cheap, high quality coal which, combined with her manufactures, filled her outbound tonnage. Americans are thoroughly familiar with the import-

ance of a "balanced traffic" in railway operation, but in discussing our chances in the carrying trade it seems to be usually ignored. No highly protected nation, including the United States, has been able to wrest either the trade or its transport from the British nor even seriously to threaten it. It is notable that England's predominance in foreign trade and transportation leaped upward immediately after the freer trade laws initiated by Sir Robert Peel in 1842 to 1846, while the carrying trade of the United States reached its apex in the middle of the following decade, and thereafter declined progressively up to 1914 in spite of all so-called protective legislation. This is not an argument for free trade or even low tariff per se. But as to the effect of a "Chinese wall" tariff on our merchant marine there seems no room for discussion.

### Our Wage Level Highest

Assuming all these matters may be settled in the best practicable way, the one still remains one factor which no law can neutralize: Our general wage level is the highest in the world, not only in lines directly affecting the operation of ships, but in every line of commercial industry.

Now a moment's thought is conclusive of this, that all the commercial value of any article is given to it by labor and service. The ore in the ground has no commercial value if it is to stay there. When brought to the surface it has a value given to it by labor and service. Then through every step up to its ultimate market it receives increased value only as form or location or availability is altered by labor and service, or by machines and methods which are their product. Even a coconut has to be picked and transported before it has any realizable commercial value.

It results that a higher wage level, means higher costs. Higher costs mean higher overhead, higher insurance, higher operation, and higher maintenance. Here is a handicap which will continue as long as the conditions of which it is the result continue. Legislation can no more control it than it can govern the rise and fall of the tides.

As compared with results obtained during the disorganization of the post-bellum period, much can be done to reduce and minimize our present disadvantage but it cannot be eliminated. There then still remains the question of how this constant factor is to be overcome or neutralized.

Here only two answers seem possible. First, the inventive genius of America, inferior to none in the world, must be called upon. For two genera-

tions the major portion of this, as well as of other assets of America, has been diverted from sea activities into other and more profitable channels. But in the lines to which it has devoted its energies it has made a worldwide reputation. No field presents a wider scope for such powers than steamship construction and propulsion. Type and model of hull and improved equipment always have possibilities, but it is likely the greatest economies of the future will come from fresh inventions in two fields, propelling machinery and economy in fuel.

For instance, the internal combustion engine and electric drive may throw all the old propulsive methods into the discard, if they only moderately realize the claims of their advocates merely by the economy of fuel and resultant saving of space and lifting capacity for revenue purposes. But it will take time to convince owners that these claims are well founded; and a still longer period before the lack of repair facilities for the new engines will cease to be a handicap. Hence the dominance of this type, if it is to come, is probably some distance in the future.

Many engineers still are skeptical about the ultimate fate of the motorship, but two offsets to such opinion should be borne in mind. The average engineer is notably conservative and will have to be "shown" conclusively before he discards the engine of which he knows every strong and weak point, in favor of an intrusive stranger of which he knows nothing. Again it is notable that Germany and Scandinavia are turning to these new types and they are seagoing nations of established commercial experience, not famous for rushing into untried and especially expensive experiments. In view of this it is not safe to disregard the motorship as possibly the commanding type of the future.

In the broad view the question of fuel looms up as of the first importance. The permanence of oil as a fuel is problematical. It will possess an advantage only so long as the price enables it to compete with other fuels, and the limits of supply, discovered and undiscovered, may not permit this level to long continue. Further, in the opinion of good authorities, the world's supply of petroleum should be rigidly conserved for lubricating purposes because once it is exhausted, no substitute will be available so far as can be now foreseen.

For these and other reasons and because the waste in the use of coal is so high—estimated at more than 50 per cent of its thermal value, science

is actively searching for any method to reduce the cost and waste of the fuel on which our whole industrial system depends.

For instance, Germany, France, Denmark and Sweden have experimented with some prospect of success with the diesel engine, using as fuel not only any kind of mineral oil but also coal tars. By German specialists in internal combustion the by-products of coal have been valued even more highly than mineral oils on account of the uniformity of their chemical qualities.

In the United States interesting experiments have been made in the utilization of coal dust for making steam, with a resultant fuel saving of approximately 30 per cent. Should these eventually make good it would mean an enormous saving by utilizing the coal waste at mines and piers which formerly has been regarded as valueless.

This merely indicates one or two lines in which the inventive genius of America may aid in the solution of our sea problem. For the present however, the problem of immediate deficits must be met. It cannot be postponed. To establish sea trade one must keep in the game, for transportation is not the sort of business where one can dodge in and out as market conditions vary. Ships must continue to run and, for the present and for some time to come, they will show a loss.

As long as these conditions obtain, owners must meet the deficits out of reserved profits or out of capital. There is no alternative except to quit at once. And the American taxpayer, as an owner, can no more escape this necessity than the humblest private owner. Subsidy would probably be ineffective at this time even if politically possible. The only other choice seems to be the issue of bonds to meet the annual deficit so long as the government retains ownership.

### Treble Barge Traffic

The Mississippi section of the government barge line carried more than 50,000 tons of freight downstream during July, or more than three times the amount handled during the same month last year, according to a statement issued by Theodore Brent, manager of the service.

More than half of this year's total represented grain shipments, principally wheat. Upstream traffic fell off during July, only 10,000 tons being carried as compared with 18,000 during the month of June. The principal upstream commodity has been sisal and the falling off in imports affected the barge line business.

# Yards Build 1429 Ships in Year

**Domestic Construction Totals 2,210,221 Tons Besides  
Foreign Account—U. S. Sales May Increase Repairs**

**A**MERICAN shipbuilding during the year ended June 30 last totaled 1429 ships of 2,210,221 gross tons, not including 33 vessels of 66,038 gross tons, built for foreign owners, making a grand total of 1462 ships of 2,276,259 gross tons. About 70 per cent of this construction was on the Atlantic coast. It is also noticeable the steel ships built during the year averaged 6000 gross tons, which is somewhat larger than the average size of the ships constructed in foreign yards.

The Atlantic Coast Shipbuilders' association reported the latter part of July a total of 102 ships of 717,624 gross tons were under construction in American yards, the bulk of the contracts being held by Atlantic coast yards. In comparison 155 ships of 391,386 gross tons were under contract in Holland; 105 ships of 390,453 gross tons were under contract in France; 128 ships of 310,333 gross tons were under contract in Italy; 45 ships of 229,262 gross tons were under contract in Japan; 43 ships of 109,410 gross tons were under contract in Denmark, and 59 ships of 85,374 gross tons were under contract in Norway.

According to the records compiled by the commissioner of navigation, the bulk of the American contract work on July 1 was held by the American Shipbuilding Co., Bethlehem Shipbuilding Corp., Federal Shipbuilding Co., Merchant Shipbuilding Corp., Moore Shipbuilding Co., Newport News Shipbuilding & Dry Dock Co., New York Shipbuilding Co., Northwest Bridge & Iron Co., Southwestern Shipbuilding Co., Standard Shipbuilding Co., and the Sun Shipbuilding Co. During the past month receivers were named for Pusey & Jones Co. and for the Johnson Shipyards Corp.

Shipyards work showed a material slowing down during June, although this was somewhat checked during July. Seventeen yards on the Atlantic reporting showed a labor roll of 64,907 during March and an employment of 48,624 men during July. This is believed to be typical.

The most pessimistic note in ship construction grows out of the fact that the United States is on the brink of an international agreement to disarm and this means a great reduction

in naval construction. At the same time the building program of the Emergency Fleet corporation is coming rapidly to a close, there being only a few passenger ships to be completed. Practically all the shipping board tonnage will have been launched by the end of the current year.

It is reported by the works manager of one of the largest American shipyards recently that cargo carriers of the standard type could be built in the United States at \$115 per ton. This price, it is understood, would also allow the shipbuilding company to make a profit, and it is stated the increased efficiency of labor is responsible for the ability of the yards to build at a lower cost, although material and freight rates remain considerably above the prewar figure. The president of an American yard has been quoted as saying that American shipyards can now build passenger liners as cheaply as the British or French shipbuilding plants.

## **3,000,000 Tons Must be Scrapped**

The Atlantic Coast Shipbuilders' association announces that at least 3,000,000 gross tons of sea-going vessels still on the register are obsolete and must be scrapped as soon as a real revival of ocean trade makes the replacement of these vessels necessary. That the American yards are preparing to take advantage of this situation was recognized last month when the shipbuilders began to make a revision of the classification of labor and wages. This reclassification, which it is expected will gradually be adopted by all yards, will make it possible to pay a laborer according to the value of his work. Later on another reduction in shipyard wages may be expected.

It is reported the United Fruit Co. is seriously considering the construction of four fruit steamers in American shipyards. It is interesting to note nearly all of this company's ships formerly were built in British yards, and it is understood the United Fruit Co. recently cancelled a contract for four ships abroad. One of the factors in the decision of the United Fruit to build in American yards is the exemption of excess profits taxes as provided for in the merchant marine act of 1920. Good news also comes from

abroad in the case of the Compagnie General Transatlantique, the Swedish-American Line, and other Scandinavian companies, who are understood to have given assurances to American shipbuilding companies that they desire to have them figure upon the next passenger liners projected by them.

According to listings made last spring, the United States has only 18 straight refrigerator ships, with a total of 3,500,000 cubic feet of storage capacity. Most of this tonnage was ordered by the government during the war. While this space is entirely disproportionate to the greatly increased tonnage of the United States, there are in addition to these vessels a number of ships engaged in the transportation of fruit, of which the outstanding example is the Great White fleet of the United Fruit Co., whose refrigerator spaces aggregate about 5,000,000 cubic feet.

The Western Union Telegraph Co. is said to be the owner in whose behalf J. W. Millard, the New York naval architect, last month sent out specifications inviting bids on a cable ship of 329.5 feet in length. These specifications were not only submitted to yards in the United States but also to foreign yards. The vessel is to be electrically propelled. There are a few more projects now in the hands of architects which will be brought out within the next month or so. Included among these are some interesting passenger steamers for private account. Nine shipyards submitted bids on the two 4300-deadweight-ton freight and passenger steamers which the Red D line proposes to build. Bids were received from the New York Shipbuilding Corp., Newport News Shipbuilding & Dry Dock Co., William Cramp & Sons Ship & Engine Building Co., Bethlehem Shipbuilding Corp., Merchant Shipbuilding Corp., Federal Shipbuilding Co., Sun Shipbuilding Co., Bath Iron Works, and Todd Shipbuilding Corp.

The Bethlehem Shipbuilding Corp. intends to lay the keel this month for the 2000-ton tanker which has been ordered by the Atlantic Refining Co. The Standard Oil Co. of New Jersey has placed an order with the Baltimore Dry Dock & Ship Building Co.



for a 350-ton deadweight motor tank barge.

A standard railway dry dock of 4000-tons lifting capacity will be installed by the Crandall Engineering Co., Boston, at the plant of the Union Shipbuilding Co., Baltimore, Md. This new dock will measure 360 feet over the keel blocks, and will be 70 feet wide, with 15 feet of water forward and 20 feet aft over the blocks. The railway will be capable of docking vessels up to and including the 8800-ton class of ships.

If Chairman Lasker of the shipping board is sincere in his desire to sell the surplus tonnage of the government,

some heavy repair work will shortly be thrown upon American yards. Already bids have been submitted on the entire fleet of wooden vessels. Various schemes for utilizing these hulks have been proposed. One is to build a pontoon bridge across the Hudson at New York. Some are to be sold abroad. Some will be salvaged and others will be utilized as barges and sailing vessels.

Disposal of this inadequate tonnage at any figure would tend to restore confidence in the shipping board as it would prove a desire on the part of the board to return shipping to private ownership and management. It

would also assist in a revival of the shipbuilding industry which is at a point now where some assistance sorely is needed.

There is a growing interest in electric propulsion for ships. This is especially true of passenger ships and vessels in congested waters. William T. Donnelly, New York, naval architect, last month demonstrated a new idea in electric propulsion. In this instance electric power is generated on one craft and transmitted to another by cable which in turn has only a motor. Mr. Donnelly has taken his two sample crafts up the New York state barge canal successfully.

## Repair Work Occupies Seattle Plant

BY R. C. HILL

GENERAL repair work is occupying a large force at the plant of Todd Dry Docks, Inc., Seattle. The new shipping board passenger liners WENATCHEE and KEYSTONE STATE are at this plant having extended alterations effected. The KEYSTONE STATE will be ready for service in August but work on the WENATCHEE will take more than a month and she is not scheduled to leave for the Orient until October. The vessel's auxiliaries, which gave so much trouble on her maiden voyage to the Orient, are being changed. At the Todd plants, general repair work is being done on a number of shipping board vessels while the drydocks are also being kept in almost constant service.

Under orders of the court, George H. Walker, receiver for the Sloan Shipyards Co., has been authorized to dispose of the surplus equipment and machinery of the plants involved at Olympia and Anacortes, Wash. The receiver reported to the court that material and equipment were deteriorating and permission was granted to sell part of it. These yards are in lengthy litigation with the government, a large sum being claimed as damages following commandeering of the yards by the government.

The modern steel shipbuilding plant of J. F. Duthie & Co., Seattle, has been dismantled and the machinery and surplus stocks are being sold by the company's sales organization.

The city council of Vancouver, Wash., is endeavoring to establish manufacturing of some kind at the yards of the G. M. Standifer Steel Shipbuilding Co. The shipbuilders constructed six 12,000-ton makers after completing 15 9500-ton freighters during the war. The yard closed several months ago. The

plant has a 30-year lease on property belonging to the port of Vancouver with a provision that the site reverts to the port if manufacturing or construction are not continued. The council may endeavor to enforce the cancellation clause.

In recent court proceedings contesting the possession of the property occupied by the Norway-Pacific Construction & Dry Dock Co., at Everett, Wash., an affidavit was presented by M. E. Barham, receiver, stating that it was expected that contracts will shortly be received for building several tankers. It is claimed that \$1,200,000 has been invested in the plant which has never done construction work. Former owners of the land are trying by court action to have the property returned. The case will be heard by the court late in August.

### Complete New Drydock

Drydock facilities on the Delaware river have just been increased. The Sun Shipbuilding Co., Chester, Pa., has finished construction of its large, new drydock. This additional equipment for handling repair work is a result of the shortage of such facilities on the Delaware river despite the active demand for repair work always experienced in that busy section.

The Sun Shipbuilding Co. has a large shipyard at Chester, located about 14 miles below Philadelphia and about 75 miles from the mouth of the Delaware river. This shipyard has eight ways, the property extending for 2600 feet along the river front. In addition, two large wet basins are operated, one 600 feet long and one 500 feet long. Each basin is 200 feet wide and is commanded by a hammer head crane of 100-ton

capacity. Chester has a good anchorage along the entire river front with a 30-foot depth of water.

The new dock, which was ready for operation on June 1, has a length of 522 feet on the blocks. Depth over the sill is 24 feet on blocks. The dock has a lifting power of 10,000 tons and will take vessels up to 560 feet in length over all. The dock is built in two sections which are designed to work independently or in conjunction with each other. It is operated by electricity.

### Shipyard Is Bankrupt

Following the petition in involuntary bankruptcy filed against the Pusey & Jones Co., shipbuilders, on July 19, by three creditors with claims aggregating \$100,242, the company on July 26 filed a voluntary petition in bankruptcy. According to this new petition, the known liabilities amount to \$1,799,000, of which \$950,000 is secured. Other liabilities are reported as unknown, because the books of the company are in the hands of Joseph P. Tumulty, the receiver appointed by the court in Delaware, who is acting with Henry A. Wise, the receiver appointed in the New York jurisdiction.

Before the completion of a reorganization begun by Mr. Wise and others early in the year, Karluf Hanssen, a Norwegian with a claim of \$650,000 obtained from the court in Delaware in June the appointment of two receivers. These receivers are Willard Saulsbury and Charles B. Evans. They sought to clear up some of the confusion in the company's affairs by filing with the court July 26 a petition asking for the dismissal of the petition of July 19, when Mr. Wise was named

receiver. They said the Pusey & Jones company has no office and no property in New York.

The company's petition says that although the assets of the company are unknown, it owns considerable real estate in Wilmington, Del., and in Gloucester, N. J., where it spent \$8,000,000 in constructing plants during the war.

The decision of the company to enter voluntary bankruptcy was reached at a meeting of the directors, when authority was given to Hartwell Cabell to sign the petition. Besides being a director of the company, Mr. Cabell is a counsel for the insurance department of New York state.

The company's petition says that the Baltimore Dry Docks & Shipbuilding Co., Baltimore, holds a judgment against the bankrupt's property for \$800,000, which acts as a lien on the property. David Blair, Camden, N. J., it also says, holds a mortgage against the property at Gloucester for \$150,000. Among the unsecured creditors appears the name of Mr. Hanssen. His claim is disputed by the company.

### Plan Small Vessels

While the maritime industry covering the construction and operation of large freight vessels throughout the world is at a low ebb, several small marine projects covering river and bay service are being contemplated.

The development of water transportation in Chesapeake bay and tributaries is being augmented through the establishment of service from Richmond to Norfolk by the Buxton line and the rebuilding of several vessels for their account through Chapman & Fisher, Philadelphia, consulting engineers and naval architects.

Also, a program, under way, for coast and bay service, calls for the construction of two small passenger and freight vessels for additional lines to be inaugurated early in 1922. Plans and specifications are being proceeded with by Chapman & Fisher and the vessels are to be constructed at their shipyard on the Great Lakes.

The vessels of the Diamond Steamship Co., have been sold by Chapman & Fisher and the company which was originally organized to develop service between north Atlantic ports and Ecuador, South America, will confine its attention to its machinery interests.

The United States shipping board has had representatives in Birmingham and Mobile looking over the situation as to the Mobile Shipbuilding Co., and its subsidiary, the Birmingham Steel Corp. with a fabricating plant in Birmingham in regard to clean-

ing up claims against the property. The Birmingham plant is in good condition and efforts are being made by the builders to get control of it when the government gives it up. Steps were taken to throw this company into bankruptcy but there has been no pressing of the petition and hope is expressed that settlements can be brought about which will result in operation of the industry in the near future. Leon Britain is president of the company.

### U. S. Shippings Show Great Increase

Tonnage increase of more than 131 per cent in documental American merchant shipping since the beginning of the war is shown by an official statement of the bureau of navigation of the department of commerce.

The total documented American merchant shipping on June 30, 1921, was 28,500 vessels of 18,350,000 gross tons, as compared with 28,183 vessels of 16,324,024 gross tons in 1920, and 26,942 vessels of 7,928,688 gross tons in 1914.

Seagoing vessels of 500 gross tons or over numbered 3723 of 13,234,401 gross tons of which 238 of 1,271,079 gross tons are ocean passenger steamers. The United States shipping board owns under 500 tons, river steamers and smaller miscellaneous craft.

Vessels of 500 tons or over registered 1798 ships of 7,993,771 gross tons. The Great Lakes tonnage aggregates 2850 vessels of 2,625,000 gross tons, and the remainder consists of seagoing vessels for foreign trade numbered 2559 of 10,620,717 gross tons of which 2272 were steamers aggregating 10,224,746 gross tons.

The total increase in the American merchant marine during the year was a trifle over 2,020,000 gross tons of which 1,090,643 gross tons were shipping board ships.

For comparison the tonnage of ships of 100 gross tons or over of the United Kingdom on June 30, 1920, aggregated 8561 of 18,330,424 gross tons, according to Lloyd's Register; the totals for June 1921 are not yet available.

### To Build Deck Machinery

The deck machinery for a 2650-ton Standard Oil Co. tanker, contract for which has been awarded the Bethlehem Shipbuilding Corporation, Ltd., will be built at the Moore plant of the Bethlehem corporation, Elizabethport, N. J. The deck machinery will consist of a 7 x 7-inch Bethlehem spring quadrant type steering gear with horizontal engines, and 8¼ x 8-inch Bethlehem spur-gear windlass

suitable for taking 1¾-inch anchor chain, and a 6¼ x 8-inch Bethlehem steam self-contained gypsy.

### Launchings and Deliveries

The LEVANT ARROW, built for the Standard Transportation Co., was launched in the South yard of the New York Shipbuilding Corp., Camden, N. J., late in July. The overall dimensions of the ship are 485 feet in length, beam 62 feet 6 inches, and depth 39 feet 6 inches. She is equipped with three single-end Scotch main boilers and one 3200 indicated horsepower engine, of cylinder, quadruple expansion, 4-crank, direct acting, surface condensing type. The vessel will have 10 double main cargo tanks with a combined capacity of 3,500,000 gallons and a displacement of 18,277 tons.

\* \* \*

The twin screw tanker J. A. MOFFETT JR., of 15,000 deadweight tons, was launched July 14 at the yard of the Federal Shipbuilding Co., Kearny, N. J. She is the last of a series of five tankers which have been built by the Federal company for the Standard Oil Co., of New Jersey.

\* \* \*

The EURANA, a single screw 63,000 barrel oil steamer, built at the plant of the New York Shipbuilding Corp., Camden, N. J., was launched July 16. The ship is 435 feet 8 inches long, 56 feet 3 inches beam and 25 feet 10 inches deep. She is equipped with three single end, Scotch, return tubular boilers. It is designed to develop sufficient power to propel the ship 11 knots an hour with ship loaded.

\* \* \*

The Chickasaw Shipbuilding & Car Co., Mobile, Ala., a subsidiary of the Tennessee Coal, Iron & Railroad Co., launched another steel ship, the KNOXVILLE CITY, early in August.

\* \* \*

The Imperial Oil Co. of Canada's steamer G. HARRISON SMITH, of 20,000 deadweight tons, was launched in July at the Sparrows Point plant of the Bethlehem Shipbuilding Corp.

\* \* \*

Last of the combination cargo and passenger ships built by the New York Shipbuilding Corp. for the United States shipping board, the PENINSULAR STATE was launched in July from the company's yard at Camden, N. J.

\* \* \*

The tanker E. T. BEDFORD, 15,000 deadweight tons, has been delivered by the Federal Shipbuilding Co., Kearny, N. J., to the Standard Oil Co. of New Jersey. The E. T. BEDFORD is the third ship of this size to be delivered to the company this year, WALTER JENNINGS and VANCOLITE being the other two.

# World Charter Market Reviewed by

## MAY BE A FACTOR

**American Fleet Now Promises Some Real Competition — New Officers Immediately Reduce Overhead Cost**

**W**HATEVER else may be said about Chairman Lasker of the shipping board he has within the first few weeks of his tenure of office moved rapidly and decidedly. Reorganization of the forces is an important step in advance. Steamship men are willing enough to give the new board a thorough trial, in fact, they still are inclined to be biased in its favor in many respects. The selection of Messrs. Love, Smull and Frey as vice presidents of the Emergency Fleet Corp. to direct operations shows at least the new board intends to deal directly with those old and tried channels of shipping management. The way these men have gone about their task is proof enough that foreign competitors may anticipate a real factor in shipping under the American flag.

In the first place government ship values were cut and a number of operators authorized to insure their vessels upon the basis of \$100 a ton. That should materially reduce the overhead cost of doing business. The old bulk cargo conference was abandoned and a chartering head appointed. The department of justice ruled that the China Mail Steamship Co. cannot operate in our coastal trade because Americans hold less than 75 per cent of the stock of the company. The shipping board has authority to exclude foreign ships between ports of the United States and our insular possessions on the Pacific. Because the Egyptian conference refused to admit American vessels for the transportation of cotton from Egypt to the United States a deft was sent to the British threatening a rate war and an imposition of the discriminatory features of the Jones law unless this method of unreasonable competition is abandoned by the English. Close on the heels of this the shipping board requested congress to enact a preferential tariff duty on goods imported in American bottoms, and Senator Jones introduced the necessary bill.

### **Begins Sale of Idle Fleet**

These are but a few of the outstanding features of the stiff backbone the shipping board has begun to show. Chairman Lasker estimates the government fleet is operating at a considerable loss and he wants to find a way to fill the holds with cargo. The idle fleet alone is said to be costing for caretaking \$4,000,000 a year. The board has early begun its campaign to sell off its useless tonnage, first offering the whole wooden fleet and then many of the ex-enemy vessels and other steel ships. The prices offered for these may not be much but it is better to sink them than to have them tied up to their anchorage and thereby constitute a potential depression to the charter market, is the view. The new board has been slow to allocate ships under the old method since it has been in power. During July

only 30 vessels, representing 231,506 deadweight tons, were withdrawn from caretaker and assigned for operation. Even the allocations of the new passenger boats building for the government were held up for review. At the same time a quick survey was made of the giant LEVIATHAN and it is understood a decision to recondition this ship and put her back in service shortly will be made. The understanding is that she will go to the International Mercantile Marine Co. for operation in conjunction with their large British boats, the OLYMPIC, MAJESTIC and HOMERIC.

Seizure of the fleet of the United States Mail line for back charter hire was a step taken under the direction of Chairman Lasker which called forth the first criticism. It was ruthless to say the least, and the facts are yet to be placed before the public. The United States Mail has started a fight in court, regained possession of the ships temporarily and is now offering to buy the vessels from the government. In shipping circles the United States Mail line has long been considered an outsider by the American Steamship Owners association, and the shipping conferences. Now it appears it is to be considered an outsider by the shipping board. The seriousness of this trouble of the United States Mail line has been heightened by the fact that it comes during a serious depression in shipping.

### **Will Cut First Cabin Rates**

After Sept. 1, the first cabin rates will be reduced by the North Atlantic conference lines 10 per cent. It is possible that the second class rates will be reduced next summer in order to stimulate tourist travel. These reductions were expected, but to offset them the steamship companies have been slow to reduce wages aboard ship. Following the acceptance of an open shop and a reduction in the engineering staffs, a similar reduction of 15 per cent was made in wages of mates and deck staffs. The wages to be paid masters of American ships, will, hereafter be subject to individual negotiation and not bound by any fixed scale. This gradual tendency toward an open shop in steamship wages promises a healthy move for the American merchant marine. Gulf ports have discovered the new shipping board is more interested in building up ocean shipping than it is to build up a particular port. Therefore they may not expect in the future any special con-

### **Cuts Appropriation**

**C**HAIRMAN Lasker's request for \$100,000,000 deficiency appropriation for the shipping board was cut to \$48,500,000 by the house committee on appropriations through elimination of \$24,000,000 intended for payment of claims and \$27,500,000 "on the general conclusion that operating costs during this fiscal year must be less per ton than during the past fiscal year". The bill as reported by the committee specifically states the money appropriated is "for losses due to the maintenance and operation of ships and for administrative purposes." Reductions in wages, subsistence, personnel, repair costs, and fuel and other economies are expected.

# Experts in this Country and Abroad

cessions in rate differentials to divert cargo from the North or South Atlantic ports to the Gulf. A meeting was held in Atlantic City last month with the various interests in attendance but it failed to reach any agreement suitable to Gulf interests. An agreement on the grain rates, however, has been effected and it is expected this commodity will be moved with less friction. The maintenance of the fixed 5-cent differential on flour rates appears to have had a salutary effect. American ship operators furthermore point out with some degree of satisfaction that flour shippers are specifying their goods be exported in American bottoms and this is assisting materially.

The Argentine freight market has continued firm for several weeks and a satisfactory advance in freight rates was recorded. As high as 59s 9d was paid for steamers on charter terms for up-river. A fair volume of business was effected for July and August loadings, but for these positions the rates were under the June. August tonnage has been obtained at 42s 6d. Prospects have been good but the demand has been chiefly for ready tonnage. Berth rates have been fair and in several instances parcels of grain have been fixed at higher rates than those current for steamers on open charter. The United States market has remained steady, rates for linseed being practically unaltered at \$8 gold from Buenos Aires.

## Tariff Affects Shipping

The inward cargoes, without doubt, have been seriously affected by the pending tariff legislation in congress. It has not only been the proposed duties but the valuation provisions of this legislation which have caused importers the greatest worry and uncertainty. Some early settlement of this matter would give a quieting effect to the freight market. It is considered far more important than the domestic rail rates, although a reduction in the latter would probably give a spurt to exports and thereby make outward cargoes for the merchant marine. Coal business has been slow but advancing

## Sells German Ships

OF THE 1,425,000 tons of ex-German ships turned over to Great Britain by the reparations commission, all but 250,000 tons have been sold for a total of approximately \$60,000,000. This averages around \$35 to \$40 per dead-weight ton. Ten of the vessels were resold to German purchasers. British buyers are offered the ships first and then the market is open to all bidders. The White Star line bought the ex-BISMARCK, now the MAJESTIC, for £1,000,000 and the COLUMBUS for more than £500,000. The Cunard line paid £850,000 for the BERENGARIA, ex-IMPERATOR. About 200,000 tons remains to be assigned by the reparations commission, according to reports.

## AWAIT POLICIES

**Lack of Plans by American Lines  
Due To Change in Shipping Board  
Administration — Harriman Active**

bringing into play new shipping policies, must first be given an opportunity to find itself and to define its intentions thoroughly before private initiative can take a step forward. In that the United American lines, the Harriman interests, have shown the first activity would indicate that this line feels confident of the outlook, and especially so as the Harriman interests have been marking time for many months. One of the first things the Harriman interests did was to permit the American-Hawaiian line, one of its subsidiaries, to absorb the Coastwise Transportation Co., another subsidiary. This gives the American-Hawaiian a fleet of 28 vessels.

It was also reported the United American is depending upon the shipping board to allocate its sufficient vessels to reestablish the lines of the Hamburg-American, with which Harriman has a joint operating agreement. When this operating agreement was first made between the German and American company a movement was put on foot to obtain the enemy passenger vessels owned by the shipping board. Under the previous administration in Washington this effort was frustrated. Recently, however, one of the directors of the German company has been in New York conferring with Mr. Harriman. It was after the departure of this German director and after Chairman Lasker and the new shipping board came into office that it was reported the shipping board was to be asked to allocate ships to these runs. It was thought their efforts would immediately be crowned with success for, when the fleet of the United States Mail line was seized by the shipping board, the board announced the vessels would be allocated to the United American for operation. That plan was halted only by the injunction obtained by the U. S. Mail.

## Finest Ship for South America

Plans for the South American services, operated by the Munson lines apparently are unchanged. The AMERICAN LEGION, a magnificent new passenger vessel constructed by the shipping board, was delivered to the Munson lines and she sailed for Buenos Aires last month. This is the swiftest and most luxurious vessel ever put in service between North and South America. There have been, however, some change in the plans for the new shipping board passenger ships which will operate out of New Orleans instead of New York. The new shipping board is reputed to have made a survey of the trade routes and determined for the remainder of the new passenger ships it looks as though the Pacific offers the best opportunity.

The Clyde line intends to extend its services to the West coast of South America. Beginning this month the line will have two regular express freight lines

from New York to ports in the West Indies and South America. The ships will sail on a regular schedule and will go as far south as Guayaquil, Ecuador. The New York-Sydney Steamship line will start a new general cargo service between New York and Australia. The Isthmian line has decided to suspend temporarily its New York-Rotterdam freight service. The Matson line and the United American lines have entered an interchange freight-booking agreement. The American line will have its passenger ships call at Cherbourg on their westward passage from Hamburg to take on passengers for the United States.

### Freight Service to Europe

Starting in October the French line will inaugurate a monthly freight service between San Francisco and other Pacific ports and Europe. The boats will make ports of call in Mexico and Central America. The Cunard liner MAURETANIA has been seriously damaged by fire and the EMPRESS OF CHINA has been chartered to take her place temporarily in the run between Southampton and New York. The White Star line has returned the BALTIC to the New York run after making extensive alterations.

It is reported a general cargo service from New York to Petrograd will shortly be inaugurated by the Nordensfjeldske Steamship Co. in conjunction with the S. O. Stray Steamship Co. There will be a sailing about every three weeks. Hugo Stinnes' Hamburg-South American Shipping Co. is going to establish a freight service from Emden to South America. According to reports received in the United States, Herr Stinnes has resigned his directorate on the board of the Hamburg-American line and intends to be independent in the shipping business.

The Royal Dutch West India Mail Co. plans to establish a regular steamship service between New York and the port of Venezuela. The service will be fortnightly and the itinerary will include Amsterdam, Paramaribo, Georgetown, Barbados, Port of Spain, Carupano, Porlaban, Cumana, La Guaira, Puerto Cabello, Curacao and New York. On the return trip vessels will make regular stops at one of the northern ports of Haiti. It is also reported that in Yugoslavia a company has been formed to establish a line of steamers to operate from Spalato, Ragusa and Cattaro to New York.

### Operators Make Rate Adjustments

The transpacific operators have succeeded in maintaining the increased freight on lumber to the Orient which was advanced from \$10 to \$12.50 on July 1. Lumber continues to move in great volume notwithstanding the higher freight. The northern conference has just made effective a new scale for long timbers which afford poor stowage, this differential ranging from \$2.50 for lengths between 30 and 40 feet to \$15 for lengths over 60 feet.

No demand exists for sailers to Australia that business having been entirely taken over by steam. The going lumber rate is around \$20. To Peru and Chile, sailing ships are getting \$18 for full cargoes. To United Kingdom, 115 shillings has been offered for a sailing ship for a full cargo of lumber. To South Africa, shippers are working on a basis of \$28 but owners will not consider a rate under \$32.50.

In the intercoastal service, continued readjustments are being made on a number of commodities, flour having been cut from \$1.45 to \$1.30 per hundredweight

while copper was reduced from \$8 to \$6. The lumber rate to New York ostensibly remains firm at \$20 but four ships were fixed for full cargoes at \$17 to Atlantic ports and a change in the conference rate is in prospect.

Japanese tonnage has been active until recently in the grain trade from north Pacific to Europe. The rate declined from 70 shillings until it touched 55 shillings. Then foreign owners withdrew and this fact together with declining sterling exchange, has advanced the grain rate until today it is fairly firm at 65 shillings. Barley fixtures have been done at San Francisco at as high as 67s 6d for two ports of discharge.

The westbound transpacific freight conference is not operating as harmoniously as was hoped because Portland, Oreg., operators are inclined to act independently. British Columbia and Puget sound lines are holding together but the Portland conference is disposed to cut rates on various items.

### Traffic Fails To Develop

The bright prospects for the port of Boston early in the summer failed to develop and the movement of freight through the port has shown little change during the past month. Exports at Montreal have increased and as Boston interests are now operating lines from the Canadian port the increasing activity there is reflected in New England. For the most part the regular lines out of Boston have maintained their scheduled sailings. The service between Boston and the Pacific coast has been especially well patronized, which clearly indicates the permanent success of this venture made early in the year. The service to Scandinavian ports has continued on an even level, but late inquiry seems to assure an early increase in the grain trade in this direction. Movement of cargo for the Mediterranean ports, which dropped to an exceedingly low point during the spring, has slightly revived, and prospects for fall trade are encouraging. The steamship HOG ISLAND recently sailed for Cairo with 4500 tons of sugar.

Reduced railroad freight rates from the West to Boston on grain, which became effective Aug. 9, are expected to cause a revival in export grain trade from Boston and Portland, Me., although as yet it is too early to see any direct improvement. Some lines report a decrease in the aggregate tonnage handled last month between Boston and the United Kingdom ports, but figures showing the actual details have not yet been compiled. The steamer ORSEGO, sailing recently to Liverpool, carried a cargo of 200,000 bushels of grain and agents of the Cosmopolitan line report Boston is to have a permanent service direct to Liverpool under the American flag some time before the end of the year.

### Grain Ships in Fair Demand

Grain boats were reported in moderate demand during July from the Gulf to the Antwerp-Hamburg range, the Adriatic, and West Italy, with Gulf rates much firmer than on the Pacific, where rates have been weakened considerably on account of Japanese tonnage offering for grain. Cotton bottoms have been in fair demand from the Gulf to Italy, unusual for this time of the year, and rates on this commodity have strengthened materially to Genoa, Naples, Venice,

Ocean Freight Rates

Per 100 Pounds Unless Otherwise Stated  
Quotations Corrected to Aug. 5, 1921, on Future Loadings

New York to	Grain	Provisions	Cotton (H.D.)	Flour	General Cargo cu. ft.	100 lbs.	Finished steel	Coal from Virginia cities	From North Pacific Ports to	Lumber Per M. ft.
Liverpool.....	\$0.26	\$0.75	\$0.37½	\$0.30	\$0.45	\$0.85	\$8.00T	.....	San Francisco.....	\$8.00 to 8.50
London.....	0.26	0.75	0.37½	0.30	0.45	0.85	8.00T	.....	South California.....	9.00
Christiania.....	0.30	0.50	0.67	0.35	0.55	1.00	10.00T	\$5.00T	Hawaiian Islands.....	14.00 to 15.00
Copenhagen.....	0.30	0.50	0.67	0.35	0.55	1.00	10.00T	5.00T	New Zealand.....	18.00 to 20.00
Hamburg.....	0.25	0.55	0.35	0.30	0.45	0.82½	9.00T	4.50T	Sydney.....	18.00 to 20.00
Bremen.....	0.25	0.55	0.55	0.30	0.45	0.82½	9.00T	4.50T	Melbourne-Adelaide.....	23.00 to 25.00
Rotterdam.....	0.22½	0.50	0.35	0.27½	0.40	0.75	10.00T	4.00T	Oriental ports.....	12.50
Antwerp.....	0.22½	0.50	0.35	0.27½	0.40	0.75	8.00T	4.00T	Peru-Chile.....	18.00 to 20.00
Havre.....	0.22½	0.50	0.37½	0.27½	0.40	0.75	8.00T	4.50T	South Africa.....	30.00 to 32.50
Bordeaux.....	0.22½	0.50	0.37½	0.27½	0.40	0.75	8.00T	4.50T	Cuba.....	20.00
Barcelona.....	0.30	20.00T	0.75	0.65	—20.00T—	—	16.00T	4.75T	United Kingdom.....	150s
Lisbon.....	0.30	20.00T	0.75	0.65	—20.00T—	—	16.00T	4.50T	United Kingdom (ties).....	125s
Marseilles.....	0.30	0.75	0.75	0.40	—20.00T—	—	10.00T	4.75T	New York.....	17.00 to 20.00
Genoa.....	0.25	0.75	0.75	0.50	0.50	1.00	9.00T	4.75T	New York (ties).....	18.00
Naples.....	0.25	0.75	0.75	0.50	0.50	1.00	9.00T	4.75T		
Constantinople.....	0.26	12.00T	0.75	0.31	—22.00T—	—	15.00T	6.00T		
Alexandria.....	0.27½	12.00T	.....	0.31	—22.00T—	—	15.00T	5.50T		
Algiers.....	0.27½	0.85	.....	0.40	—22.00T—	—	12.00T	5.00T		
Dakar.....	23.00T	23.00T	23.00T	20.00T	—23.00T—	—	20.00T	.....	Oriental ports.....	\$ 7.00T
Capetown.....	20.00T	23.00T	23.00T	20.00T	—23.00T—	—	15.00T	.....	United Kingdom.....	60s to 65 sT
Buenos Aires.....	.....	.....	.....	.....	—20.00T—	—	12.00T	4.00T	Scandinavia.....	60s to 65 sT
Rio de Janeiro.....	.....	.....	.....	.....	—22.50T—	—	16.50T	4.00T	Mediterranean.....	63 to 65 sT
Pernambuco.....	.....	.....	.....	.....	—23.50T—	—	17.50T	4.50T		
Havana.....	0.44½*	0.50*	.....	0.44½*	0.47*	0.94*	0.44½*	2.00T		
Vera Cruz.....	.....	0.70	.....	0.45	0.45	0.90	0.60	3.00T		
Valparaiso.....	.....	1.25	1.16	1.00	0.70	1.25	16.00T	5.00T		
San Francisco.....	.....	0.75	.....	0.85	.....	.....	0.75	.....		
Sydney.....	.....	.....	.....	.....	25.00	30.00T	15.00T	.....		
Calcutta.....	.....	21.00T	.....	.....	—21.00T—	—	18.00T	.....		
T—ton		†landed	††Heavy products limited in length.							

Principal Rates to and from United Kingdom

Grain, River Plate to United Kingdom.....	42 6	Coal, South Wales to Buenos Aires.....	14 0
Coal, South Wales to Near East.....	16 6	Iron ore, Bilbao to Middlesborough.....	7 6
Coal, Newcastle to France.....	7 0	General British market, six months time charters, per ton per month.....	6 0

Bunker Prices

At New York			At Philadelphia			Other Ports	
Coal	Fuel oil	Diesel oil	Coal	Fuel oil	Diesel oil		
Alongside per ton	16 baume per barrel	gravity 25-30 per gallon	per ton	16 baume per barrel	gravity 25-30 per gallon		
Jan. 8.....	\$7.00	\$2.94	Jan. 10.....	\$9.45	.....	Boston.....	\$9.00
Feb. 5.....	5.40 @ 6.80	2.50	Feb. 8.....	8.40	2.31	Boston, oil, per gallon.....	\$1.25
Mar. 7.....	5.25 @ 6.75	2.35	Mar. 7.....	7.60	2.10	Cardiff, coal, per ton.....	40s
Apr. 6.....	6.40 @ 6.75	1.95	Apr. 7.....	5.75 @ 6.00	1.98	London, coal, per ton.....	40s
May 7.....	6.35 @ 6.30	1.85	May 10.....	5.50 @ 5.90	1.68	Antwerp, coal, per ton.....	52s
June 3.....	6.00 @ 6.30	1.70	June 8.....	5.65 @ 5.90	1.89		
July 8.....	5.75 @ 6.25	1.45	July 7.....	4.90 @ 5.45	1.47½		
Aug. 5.....	5.75 @ 6.25	1.45	Aug. 9.....	5.05 @ 5.40	1.37		

Trieste and Fiume. Inquiries for cotton from Barcelona, Bremen and the Far East are on the increase.

In the general cargo line, there is much competition and hustling freight agents are getting a better share of what is offering than those not quite so active. The impression prevails that the coming wheat season may not prove to be all expected of it in the way of demand and those who have been depending upon full cargoes of that commodity may find some disappointments will be awaiting them.

The ceasing of operations in the Mexican oil fields has increased the number of tankers laid up indefinitely but many operators are taking advantage of the lull to have their vessels put in repair.

Mexican interests are reported to have been active recently in buying cattle and live stock for immediate consumption but steamship operators are pointing out that the extension of rail construction in Mexico continues.

Rates in the full cargo sailing vessel market continue weak with the only cargoes offering being lumber to Cuba and the West Indies, limited coast-wise trade and now and then a cargo of sulphur or phosphate.

Some steam charters reported during July for grain included Gulf to Antwerp or Rotterdam, 27 cents, July; Gulf to Antwerp-Hamburg range, 26 cents August and Gulf to West Italy, 8c, July-August. A coal charter was reported Jacksonville to Algiers, July 15, at \$5.75.

Cotton Rate Conference Fails To Agree

From Our European Manager

London, Aug. 10, (by cable)—Renewed negotiations, in regard to cotton rates, between the Alexandria Produce association conference lines and the United States shipping board have been broken off, it is reported, due apparently to prevailing strong pro-British influences.

Better feeling appears with the resumption of heavy coal exports. Low rates are being offered on Ameri-

can grain for fall loading, a typical rate being 27 cents per 100 pounds from Montreal to Denmark. Far eastern rates are steady, while those on grain from Australia to the United Kingdom have risen to 70 shillings. Coal from Cardiff to the River Plate now is being hauled for 14 shillings per ton while rates on grain from the Plate to the United Kingdom are easier.



# What the British Are Doing

## Short Surveys of Important Activities in Maritime Centers of Island Empire

**B**RITISH shipping gradually is recovering from the effects of the prolonged coal strike and the sentiment in the charter markets is more cheerful than it has been for some time past. Coal exporting has been resumed and will gradually increase; this makes it possible for British shipowners to obtain round voyage revenues thus making more tolerable the very low rates which it is now necessary to quote. Steamers to load coal from Cardiff to the River Plate have been secured at 17 shillings 9 pence (\$3.20) per ton. This rate is down to the prewar level. For shipment to west Italy 17 shillings 6 pence (\$3.15), and to Bombay 22 shillings 6 pence (\$4.05) recently has been quoted; to the Cape Verde islands 13

shillings (\$2.34) has been paid. Recent coal charters from Baltimore to the Cape Verde islands are stated to have been made for 26 shillings 3 pence (\$4.74).

In coal and freight chartering circles, it is believed that although Great Britain may experience severe competition, particularly in South America and Italy, relatively little difficulty in the long run is going to be experienced in re-establishing the British export coal trade in its natural markets.

**W**OODEN steamers are practically unsalable in European markets. Recently the wooden steamer EIRINI was sold in Cardiff, Wales, for £1200

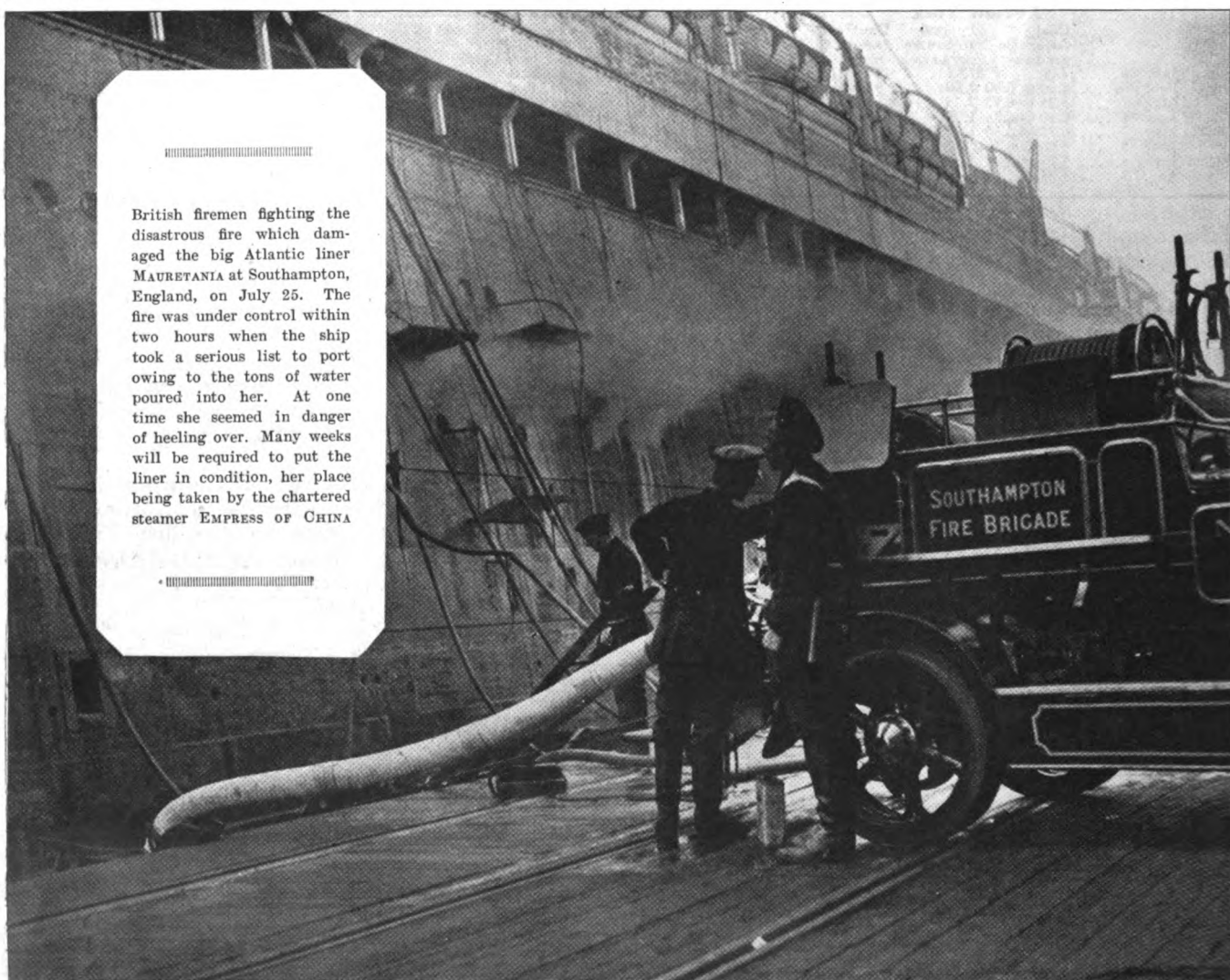
(\$4325). She was built in Canada in 1919 at a cost of \$500,000 and has made but few voyages and only one trip across the Atlantic.

\* \* \*

**T**HE national joint council for dock labor has ratified the recommendations recently made by the negotiating committee on the question of the employers' demand for a reduction of 4 shillings (\$0.72) in the present wages of 16 shillings per day. The employers' full demand was not conceded by the negotiating committee, a compromise figure of 2 shillings (\$0.36) per day reduction being recommended. This has been accepted and the minimum wage, therefore, is reduced to 14 shillings (\$2.52)

\* \* \*

British firemen fighting the disastrous fire which damaged the big Atlantic liner MAURETANIA at Southampton, England, on July 25. The fire was under control within two hours when the ship took a serious list to port owing to the tons of water poured into her. At one time she seemed in danger of heeling over. Many weeks will be required to put the liner in condition, her place being taken by the chartered steamer EMPRESS OF CHINA





per day. A further reduction of 1 shilling per day in January, 1922, has been agreed to. All piecework earnings are to be reduced so that the pieceworkers will receive 2 shillings and 1 shilling less per day of eight hours after Aug. 4, and Jan. 1, respectively. Overtime rates for day and piecework are to be readjusted in accordance with the revised rates of day wages.

\* \* \*

**B**RITISH and ex-enemy ships continue to be sold in the London market at quite low prices. It is interesting to observe, however, that sales are taking place right along and that Lord Inchcape, who has charge of the sales of ex-enemy tonnage, has so far been able to keep up his average of one ship per day. This would appear to be in contrast with the efforts of the United States shipping board which seems to have come to a standstill with the sale of its tonnage.

It is understood in London that the

success of the British sales campaign is due to the policy of the British shipping authorities of following the market whatever it is. This policy is being rigidly adhered to in connection with ex-enemy tonnage and some exceedingly low prices have resulted. The *SCOTIA*, an ex-German recently sold at auction in London, brought only 9 shillings (\$3.60) per ton. She was built in 1890 and is of 2558 gross tons. The *CLAUS HORN*, 4174 gross tons, built in 1906, sold for £3 11 shillings 10 pence (\$12.95) per gross ton; the *HERMAN SAUBER*, 2948 gross tons, brought £5 1 shilling 9 pence (\$18.30); while the highest price on record recently was realized for the *JAVARY*, 4198 gross tons, which sold for £10 2 shillings 6 pence (\$36.50) per gross ton. The prices realized per deadweight ton on the foregoing ships were as follows: *CLAUS HORN*, £2 6 shillings 2 pence (\$8.30); *HERMAN SAUBER*, £4 3 shillings 4 pence (\$15.00); and the *JAVARY* £5 17 shillings 3 pence (\$21.10). The

price of a new British built steamer is now about £8 10 shilling (\$30.60) per gross ton. This is for an 8000-ton boat although it is claimed that the minimum cost of building a boat of this class in British yards is £18 (\$54.80) per ton.

\* \* \*

**L**ABOR troubles are still hampering British shipyards although the situation is now more satisfactory than it has been at any time previously since the end of the war. Vicker's yard at Barrow has been closed down for a fortnight owing to the continuance of the ship carpenters' dispute. This strike also made it necessary to send the new Cunard liner *CYTHIA* to the continent to finish her interior woodwork. British shipowners are sending a good many ships to Holland for repairs claiming that they can get the work done more quickly across the channel and at a price usually 20 per cent less than the cost in Great Britain.

## Few Orders Reach British Shipyards

*From Our Middlesbrough Correspondent*

**M**ODIFICATION of the congestion of vessels in the rivers and docks on the northeast coast of England has taken place. Bunkers having become available, foreign vessels, held up for months, have been able to coal and depart. Some time must elapse before any appreciable difference will be made in the tonnage available. On the Tyne, half-a-dozen vessels are moored abreast at the buoys while an ominous indication of depression is provided by the unfinished vessels which are left on the builders' hands. A Norwegian firm paid, it is said, £100,000 to be relieved of its responsibility in connection with one vessel which remains unfinished—and which would require a further equal sum to complete.

The condition of the industry is reflected in the trade of the river Wear. During the month of June, but one vessel was launched, that being the *MAPIA* 9475 gross tons, built by Messrs. Sir James Laing & Son for a foreign firm.

\* \* \*

### Test New Schooner

The official trial trip of the motor-ship *CARGO SHIPPER* which recently took place off the Tyne proved interesting as it is claimed for this converted schooner, whose motor engines are driven by oil, that the maximum cargo capacity for her dimensions as a coaster has been evolved. Loaded with 320 tons

of grain in sacks, she left Newcastle Quay for King's Lynn. The sea was too rough for a speed trial on the measured mile, so for this test the vessel was taken back into the river. With the tide she made 9.25 knots per hour, and on the return mile she registered 7.059 knots, her mean, 8.1 knots being more than a knot better than was expected of her.

\* \* \*

### Complete Dock Repair

The new dock at Seaham harbor has just been reopened after being idle for 20 months owing to the gates being carried away during the great storm in November, 1919. This dock which cost nearly £500,000 was opened in 1905, and is the mainstay of the port. The repairs of the dock have cost over £70,000.

\* \* \*

### Labor Efficiency Low

The menace or restricted output and its effect on the British shipbuilding industry is forcibly illustrated by the statement made to the stockholders of the marine engineering works of Messrs. Richardson, Westgarth & Co. In the last year, the company engined 38 ships with aggregate marine horsepower of 96,300. The problems facing the firm were explained by D. B. Morrison, who asserted that "the average wage per hour was now practically three times greater than before the war, while it

took fully one-third more hours to do a given amount of work. The result is that the actual labor cost of any given marine job had increased four times. Estimating the total working hours per man per annum at 2597, the absentees from work were responsible for the loss of 258 hours per man. The combined effect of three factors—the reduced efficiency of labor, the shortened week, and the increased lost time—was equivalent to a reduction in output of 37½ per cent. In other words, with a given number of men on day shift only, and without overtime, the company's production of engines would now be only five-eighths of its prewar production."

\* \* \*

### Ship Output Down

The output of shipbuilding from the yards on the Wear during the first six months of the present year has been only 14 vessels totaling 70,902 tons, compared with 35 vessels and 160,263 tons during the corresponding half of last year.

Regarding the size of vessels under construction in British yards, Lloyd's *Register of Shipping* states few vessels of big dimensions are now building. Only one is between 25,000 and 30,000 tons; five between 20,000 and 25,000 tons; 24 between 15,000 and 20,000 tons, and 27 between 12,000 and 15,000 tons.

The remainder range from 1000 to 10,000 tons.

As to vessels building for abroad, Norway comes first with 55 ships of 201,663 tons, and France second. The British dominions have 24 vessels of 90,050 tons building.

The following table gives the number of vessels and total tonnage under construction at northeast coast ports at the end of June this year and on June 30, 1920:

	—1921—		—1920—	
	Vessels	Tons	Vessels	Tons
Tyne .....	118	680,334	129	650,160
Wear .....	65	328,488	70	329,503
Hartlepool .....	18	89,965	21	98,880
Tees .....	43	213,258	56	249,160
Total .....	244	1,312,045	276	1,327,712

At the present time, there is not a great deal of difference between the two sets of figures. The reduction in the aggregate amounts to 32 vessels and 15,667 tons.

## Norwegian Ship Trials

The FRITHJOF I, which has been built by Messrs. Eltrinhams Ltd., Willington Quay, for Messrs. Aktieselskabet Frithjof, Tonsberg, Norway, (Alf. Monsen, managing owner), has undergone satisfactory trials. The principal dimensions of the vessel are: Length 299 feet, breadth 44 feet, depth molded 23 feet, with a deadweight carrying capacity of 4050 tons. The steamer has been constructed for the Baltic timber trade and general trading purposes.

\* \* \*

## Few Orders Received

The difficulties facing British shipbuilders are serious. Sir William C. Gray, head of the firm of West Hartlepool shipbuilders, stated with reference to prospects of securing new orders

that new work can not be secured even at a heavy loss. The only work which the company had secured during the past 18 months was not really new orders, but transfer of two oil tankers from other builders. He was afraid that for some time to come no shipowners would be prepared to place orders for new tonnage to be built when the yards can accommodate them without crowding the ways.

Sir William said of the firms profit-sharing scheme that "the response on the part of some of the employes had not, so far, been up to expectations. There were still six months to run before the period ended which would give the workmen, who numbered over 4000, the opportunity of encouraging the directors to renew the scheme for a further period with such amendments as experience had proved advisable.

# Agree to Tangiers Port Development

BY FRANCIS MILTOUN

**A**N AGREEMENT between France, Spain and Great Britain has been reached whereby the projected port works of the internationalized city of Tangiers in Morocco are to be carried out immediately. America, with treaty rights dating from the time of the great sultan of the Moroccos, is not participating while France has become the heir of the Austrian participation in this long held-up contract for port development and Spain and Great Britain each becomes a partner to the extent of 20 per cent.

Spain is protesting against her own participation being so small, but France as protector of the present sultan caused, to be published a sultanic decree, on June 2, conceding the port works of Tangiers to an international society which had been formed before the war. It is believed the succession will be taken over by the Schneider (Creuzot) combination which has the port works of Casablanca in charge. The treaty of Versailles left nothing of the Act of Algeiras by which other nations of Central Europe had rights in the project.

Tangiers is some day going to be the north African port from which the African railway which is to form the short line between Central Europe and South America is to start. It will be a factor in European and African commerce. Already the United States has a legation and a consulate in this little plot of internationalized ground and the chief commissioner who looks after the interests of the international lighthouse

at Cape Spartel, at the entrance of what is rather wrongly called the straits of Gibraltar and a British waterway, is the American minister.

The resentment of France for the Spanish protest is beyond belief; it has all the elements of a first class international embroglio. Tangiers as a port of call may some day supplant Gibraltar itself and all other ports of the Mediterranean, once fueling stations have been established. At present it is a misnomer to state that Tangiers has a harbor even. The port may become the gateway of all the Moroccos as the harbors of the western coast, save possibly Casablanca years to come, are scarcely more than landings, and even that consists of passengers and freight being landed by small boats and barges, as in the case of Rabat where in certain years the port has been closed for 325 days out of the 365. The development of Tangiers, surrounded as it is by the narrow strip of the Spanish zone, will change all this. The prosperity of Morocco, the newest of old countries to be developed by the genius of man, depends upon it.

## Egyptian Cotton Muddle Reveals Fight Is On

Egyptian cotton is one of the world's commodities that competes with those of American production. The carrying trade in Egyptian cotton has supposedly been a British monopoly—even to American ports. This Egyptian cot-

ton has undeniable qualities which are appreciated by the American industry.

The Alexandria, Egypt, Producers association, the United States shipping board and the "Liverpool Conference" of British shipowners and operators are by no means in sympathetic accord with each other. Shippers have everything to gain in patronizing American ships which will carry cotton to United States Atlantic range ports for 40 shillings per ton and even to England at 25 shillings, while the British boats are asking respectively 60 shillings and 40 shillings.

The *Egyptian Gazette*, Alexandria, says that Egyptian producers and their customers are avowedly being shorn of a part of their rightful profits if they contract with the traditional British consortium though more than 90 per cent of local shippers have agreed to patronize only British ships. The secretary of the American Chamber of Commerce at Cairo states that American ships are operating on open competition which has worked against their own interests as the conference boats have intrigued and "resorted to unfair methods."

A pretty quarrel is being brewed. Whatever the outcome, even should the government at Washington take a hand, as it might rightly enough according to certain provisions of the Jones act, American ships abroad are being viewed with increasing disfavor and difficulties are continually being put in their way against competing

on the free seas. There was something about the "freedom of the seas" in the Versailles treaty, it will be recalled. What we know less about is the actual meaning of the phrase.

Other deep sea ports and oceans aside, American ships in the Mediterranean are going to have to fight desperately for their business. Fortunately they have their own oil fueling station at Bizerta on the very door sill of the east and west traffic of the Mediterranean lake.

### Choose Oil for British Naval Vessels

The South Wales coal trade is shortly to lose a good customer for its coal. Welsh coal has for many years been the favorite fuel for British naval purposes, owing to its practically smokeless character. But the civil lord of the British admiralty has announced in the house of commons that the policy now decided upon by the admiralty is to build ships to burn oil fuel. In a short time the British fleet will consist only of oil-burning ships.

He stated that with regard to the calorific value of oil and coal, it was found that two tons of oil went as far as three tons of coal. In many ways, oil fuel effected a saving. It involved less time and labor, less room for storage, and a great reduction in the number of men employed.

Nearly a million pounds will be spent in establishing stations along the coast from which oil can be supplied to ships of the navy. Tanks also will be built at such places as the Cape of Good Hope, the Falkland islands, Hong Kong, Port Said, and similar places.

### Suez Canal Traffic

The balance sheet of the Suez Canal Co., just published, shows that 17,574,657 net tons of shipping passed through the canal in 1920, as compared with 16,031,802 tons the year before. Receipts from this traffic in 1920 amounted to 144,593,953 francs.

A curious circumstance is recorded for the years of war by reason of the transfer of francs received to France, thereby sustaining and profiting from exchange. This actually brought about a reduction of 25 centimes in the fee per ton for passing traffic, from which is to be taken another 25 centimes as of Oct. 1, 1921. This makes a reduction of 50 centimes a ton under high war rates of 8.50 francs per ton. The figure is, however, 1.75 francs per ton above prewar rates but it is intended to reduce fees as regularly as possible. A challenge, perhaps, to the competition of the Panama canal.

The number of passengers handled

through the canal in 1920 was 500,147, a decline of about 27,000 from 1919, but an increase of 220,000 over 1913.

During 1920, the largest ship which ever passed the canal was carried successfully through—a vessel of 20,000 tons.

### Many Spanish Ships Idle

The Spanish Shipowners' association in recent statistics shows the great number of Spanish ships and steamers now laid up as a result of the economic crisis which Spain, like the rest of the world, is undergoing. In all, 308 units are laid up, totaling 452,060 tons. Other units of the Spanish merchant fleet are lying at anchor in many European and foreign ports. The significance of this may be seen in Lloyd's figures to the effect that the entire steam merchant fleet of Spain numbers only 582 vessels, which with five hundred odd sailing craft, totals only 926,364 tons.

### Establishes Oil Station

Marseilles is looking forward to meeting competition of Great Britain at Malta and Gibraltar and the United States at Bizerta for the supply of fuel oil to oil burning steamships in the Mediterranean. Marseilles may have difficulty in diverting this traffic from the American station at Bizerta, for instance, or from the future station to be established at Tangiers. However, Marseilles already possesses a sizable fleet of oil burning steamers. Four 12-inch pipe lines leading from the shore reservoirs at Les Aglaydes to the docks are already established, delivering 120 tons of fuel oil per hour. Current prices are in the neighborhood of 500 francs per ton.

### Will Maintain Program

In spite of the opposition of private yards, the program of ship construction for private account is being held to by the French minister of marine by which the idle facilities of the naval arsenals not actually occupied for government account may be used. The program includes: 23 cargo steamers of the MARIE-LOUISE type, 3100 tons deadweight; two passenger liners of the DUC D'AUMALE type, 4800 tons; and six passenger liners, each of 16,000 tons.

### Buys 113 Old Warships

One of the biggest deals in warships by a British ship breaker is just reported. Messrs. T. W. Ward, Ltd., London, has purchased from the royal navy 113 warships for the purpose of breaking up. The vessels include five

battleships, six cruisers, six light cruisers, three flotilla leaders, 72 torpedo boat destroyers, 13 torpedo boats and eight monitors. The purchase was made some time ago, the admiralty selling out because the ships were obsolete. They would have been broken up long since, but on account of the war were retained on commission for special duties. Among the ships are the original DREADNOUGHT, the MAGNIFICENT, the MARS, the DOMINION, and the HINDUSTAN, four battleships of the predreadnought class.

The price to be paid is the flat rate of \$9.76 per ton on the actual displacements of the vessels to be ascertained by agreement.

### Dutch Refrigerator Ship Is Launched

Swan, Hunter & Wigham Richardson, Ltd., Wallsen-on-Tyne, England, have launched a large cargo boat built to the order of Koninklijke Hollandsche Lloyd and called MONTFERLAND. This is the second ship which the builders have constructed for these owners, the other being the AMSTELLAND delivered last year. The MONTFERLAND has a cruiser-shaped stern and is 477 feet 3 inches in length overall. Her extreme width is 60 feet 2 3-4 inches and she has a molded depth of 38 feet 9 inches. Her deadweight carrying capacity will be 9800 tons on a draft of 26 feet.

Two of the holds are refrigerated for carrying frozen meat while the other three holds are for general cargo. The cellular double bottom of the ship has been built to carry either water ballast or oil fuel. Accommodation is provided for the sailors and firemen in the after end of the ship while the officers and engineers have theirs amidships.

Five cylindrical boilers 15 3-4 feet in diameter are provided, fitted with superheaters and working at a pressure of 200 pounds per square inch under forced draft. The main engines consist of a set of compound turbines of the Metropolitan Vickers-Rateau type working in series and driving a single propeller through double reduction gearing. The gravity system of lubrication will be used but pressure can be employed if needed.

### Adds New Port at Naples

Naples has for long had the greatest port traffic of any of the Mediterranean ports, not so much in every case in merchandise discharged or loaded but as a port of call combined with its status as a terminal port. A new industrial port is being built at Baia-Averno in the Naples suburbs. A new dry dock is to be built of a length of 280 meters and a width of 40 meters.

# Late Flashes On Marine Disasters

## Brief Summaries of Recent Maritime Casualties— A Record of Collisions, Wrecks, Fires and Losses

NAME OF VESSEL	DATE	NATURE	PLACE	DAMAGE RESULTING	NAME OF VESSEL	DATE	NATURE	PLACE	DAMAGE RESULTING
Azalea	July	9 Collision	Pollock Rip	Heavy Total loss	Gallia	June	17 Sank	Calcutta	Total loss
Active	July	8 Collision	Nix's Mate	Machinery	Gladys M. Hollet	July	2 Leaking	Near Martinique	Not stated
Alaska	July	5 Disabled	Astoria	Boilers	Grangetown	July	2 Struck wreckage	At sea	Not stated
Anthraxite Bridge	July	9 Disabled	Gibraltar	Bows	Genesta	July	29 Collision	Near Shelburne	Total loss
Ashbee	July	11 Struck pier	Liverpool	Eng. trouble	Gibol Haman	July	13 Struck quay wall	Cardiff	Considerable
Admiral Watson	July	5 Disabled	At sea	Tube leak	Greifenfels	July	8 Fire	Antwerp	Not stated
Askawake	July	15 Disabled	St. Michaels	Prop. blade lost	Hanley	June	27 Disabled	Gibraltar	Prop. broke
Agwilake	July	4 Disabled	Ponta Delgada	Slight	Harmodius	July	14 Collision	East of Fire Island	Not Stated
Ariano	July	13 Collision	Sewall's Point	Not stated	Hawkeye State	July	12 Sea cocks open	Salina Cruz	Not stated
A.A. Daughtery	July	10 Blown ashore	Morgans Point	Eng. trouble	Haliartus	June	25 Collision	Montevideo	Slight
American Legion	July	25 Disabled	Hamilton	Not stated	Hamer	July	25 Grounded	San Francisco Bay	Not stated
Astral	July	20 Struck locks	Near Port Arthur	Not stated	Herbert A. Wylie	July	21 Disabled	Near Fire Island	Machinery
Aida	July	15 Grounded	Vita	Considerable	Hamburg Maru	July	4 Disabled	Near Honolulu	Crankshaft broken
Admiral Farragut	July	22 Disabled	Near San Francisco	Not stated	Herman Sauber	July	5 Collision	Saugor Roads	Moorings lost
Ardmore	July	21 Explosion	Morse's Drydock	Considerable	Hansa	June	28 Collision	Hamburg	Slight
Augusta G. Hilton	July	20 Collision	Boston	Not stated	H. H. Porter	July	21 Disabled	Duluth	Cracked piston head
Arcadian Queen	July	24 Fire	Turks Island	Not stated	Isanti	July	6 Disabled	Boston	Steerer trouble
Arsan	July	19 Struck obstacle	Pensacola	Not stated	Isanti	July	14 Disabled	SE. of Halifax	Oil pumps
A-799	July	7 Foundered	At sea	Lost	Isanti	July	25 Disabled	St. Johns	Eng. trouble
Algerier	July	2 Collision	Buenos Aires	Not stated	Ischia	June	20 Fire	Genoa	Slight
Anacortes	July	30 Disabled	Falmouth	Water in hold	Islandia	June	21 Listed and sank	Piraeus	Not stated
Bellemine	July	14 Disabled	Tuskar Rock	Turbine	Innovation	July	26 Sank	Off Nova Scotia	Not stated
Bavington	July	16 Disabled	Near Southampton	Not stated	Iver Heath	July	23 Collision	Walton Bay	Plate bent
B Shaw	July	13 Struck rocks	Point Judith	Machinery	Ingvar	July	7 Collision	Brunsbüttelkoog	Leaking
Bowes Castle	July	26 Disabled	Algiers	Considerable	Jean L. Somerville	June	20 Ashore	Caibarien	Total loss
Binghamton	July	19 Ashore	Near Yarmouth	Not stated	Johanna Smith	July	3 Disabled	San Francisco	Tail shaft broke
Bradburn	July	5 Slipped off bank	Newcastle	Not stated	John T. Hughes	July	11 Lock gate broke	Delaware canal	Bottom stove in
Bucegi	June	23 Collision	Galatz	Not stated	Joazeiro	June	30 Collision	Bordeaux	Slight
Bjornsterne Bjornson	July	28 Disabled	New York	Prop. blade lost	Japan Arrow	July	25 Struck bridge	Port Arthur	Not stated
Bisley	July	1 Fire	Dartmouth	Eng. store-room	Keifuku Maru	July	3 Disabled	Bolivar	Pump trouble
Breconian	July	8 Disabled	New York	Steerer lost	Kalfarli	July	4 Grounded	Galveston	Not stated
B. F. Jones	July	22 Grounded	Detroit River	Jettis. cargo	Karl Leonhardt	July	9 Collision	South Shields	Not stated
Charles Racine	July	7 Disabled	Lorenzo Marques	Not stated	Kenkon Maru No. 3	June	24 Ashore	Near Kirado	Not stated
Chattanooga	July	7 Disabled	Off Cape Race	Not stated	Kelvinbrae	July	27 Grounded	Galveston	Not stated
Cecilia Cohen	July	15 Ashore	Concho Reef	Not stated	Lorain	June	30 Struck bank	Panama Canal	Bow damaged
Constantinus Pateras	June	22 Ashore	Peniche	Undamaged	Lavinia M. Snow	July	9 Collision	Pollock Rip light-ship	Lost head-gear
Canadian Gunner	July	16 Fire	Barbados	Not stated	Lord Antrim	July	3 Ashore	Bay St. Lawrence	Not stated
Clement Smith	July	23 Disabled	Near Boston	Machinery	Lake Furley	July	16 Disabled	London	Machinery
Coelleda	July	17 Disabled	Near Baltimore	Machinery	Leora M. Thurlow	July	12 Sunk	Off Yucatan	Total loss
Carmarthenshire	July	14 Collision	Galveston	Not stated	Ludworth	July	9 Collision	Near Gravesend	Damaged bow
Crofton Hall	July	17 Collision	London	Not stated	Libertas	June	29 Collision	At sea	Undamaged
Cliffwood	July	24 Aground	New Orleans	Undamaged	Loredano	June	30 Disabled	Suez	Boilers
Cook	June	17 Disabled	Charleston	Machinery	Liberty Land	July	28 Disabled	Near San Pedro	Eng. trouble
Crisfield	July	18 Ashore	Jamaica Bay	Not stated	Laurel	July	29 Disabled	Near St. Thomas	Turbine
Cotigan	Aug.	1 Fire	Staten Island	Not stated	Lake Slavi	July	23 Disabled	Ponce, Pr.	Boil. tubes
Canadian Exporter	July	31 Ashore	Willapa Harbor	Total loss	Meriweather	July	9 Fire	Off Little Point, La.	Total loss
Canadian Trapper	July	12 Grounded	Lake St. Peter	Not stated	Marne	July	10 In distress	Gulf of Mexico	Not stated
Clydesdale	July	3 Disabled	At sea	Condenser	Masuda	June	30 Collision	Gravesend	Unknown
Daniel Webster	July	9 Disabled	St. Michaels	Boil. tubes	Munabro	July	5 Collision	Vineyard Sound	Plates dam.
Douglas Adams	July	7 Missing	At sea	Not stated	Mexicano	July	4 Disabled	Savannah	Not stated
Delisle	July	11 Grounded	Leesoe	Not stated	Mayari	July	8 Ashore	Near Highland Light	Not stated
Dan MacAllister	July	9 Sank	Near New York	Total loss	Moonlight	July	9 Ashore	Freemans Rock	Slight
Delambre	July	20 Disabled	At sea	Eng. trouble	Maricopa	June	25 Disabled	Panama	Eng. trouble
Dungannon	July	29 Leaking	Savannah	Not stated	Mopang	June	24 Struck mine	Near Bourgas	Total loss
Dorset	June	30 Fire	Liverpool	Slight	Mauretania	July	25 Fire	Southampton	Heavy
Eastern Sword	July	7 Ashore	Belfast	Not stated	Major Wheeler	July	21 Disabled	Near New York	Boilers
Estrada Palma	July	4 Fire	Winter-Quarter Shoal	To cargo	Mapledawn	July	14 Collision	Cape Santa	Not stated
E. Marie Brown	July	14 Collision	East of Fire Island	Total loss	M. J. Scanlon	July	13 Disabled	Falmouth	Water in oil
Emily F. Northam	July	14 Ashore	Near Wolves	Considerable	Majestic	June	28 Collision	Hamburg	Slight
Endicott	July	14 Leakage	Near Norfolk	Slight	Maplecourt	July	1 Fire	Liverpool	Slight
Effingham	July	21 Struck rocks	Near Portland	Slight	Marie	June	27 Collision	Venice	Leaking
Evelyn	July	26 Disabled	Gravesend Bay	Machinery	Mabriton	July	23 In mud	Galveston	Not stated
Emma W. Day	July	20 Disabled	Cape Henry	Considerable	Mary G. Duff	July	29 Collision	Near Shelburne	Not stated
Eastern Belle	July	28 Grounded	Cork	Not stated	Multnomah	July	27 Collision	San Francisco	Not stated
Eskbridge	Aug.	2 Collision	At sea	Deck damaged	Morro Castle	July	31 Struck by lightning	Atlantic City	Mainmast broke
Eurana	Aug.	3 Disabled	Colombo	Condenser	Manchester	July	21 Struck obstacle	Racine	Wheel damaged
Fort Morgan	July	9 Collision	Diamond Shoal	Bow damaged	M. Shiras	July	21 Grounded	Port Huron	Not damaged
Flora L. Oliver	July	21 Ashore	Long Island Head	Leaking	Nordhvalen	July	6 Collision	At sea	Hole in side
Fenchurch	July	28 Collision	Brooklyn	Not stated	Nancy Hanks	July	9 Collision	Diamond Shoal	Not stated
Faraday	July	31 Disabled	Newport	Condenser					
Glendola	July	5 Disabled	Norfolk	Machinery					
Gladys	July	6 Collision	At sea	Slight					
Grace & Edna	July	15 Disabled	Below Cape Henry	Eng. trouble					
General Pershing	July	11 Ashore	Endymion Rock	Total loss					
Gertrude	July	7 Gale	East Cape	Total loss					
General Turner	July	17 Struck Mine	Off Caliakra	Total loss					
George Washington	July	20 Collision	Boston	Undamaged					
Georgina Rolph	July	21 Grounded	Astoria	Undamaged					
Gorgon	July	5 Fire	Off Port Headland	Slight					

# Late Flashes On Marine Disasters

Brief Summaries of Recent Maritime Casualties—  
A Record of Collisions, Wrecks, Fires and Losses

NAME OF VESSEL	DATE	NATURE	PLACE	DAMAGE RESULTING	NAME OF VESSEL	DATE	NATURE	PLACE	DAMAGE RESULTING
Northumberland	July	9 Collision	South Shields	Not stated	Seine Maru	Aug.	1 Ashore	Astoria	Undamaged
Niobe	July	6 Disabled	Cuxhaven	Engine	Sueppe	July	12 Disabled	Bordeaux	Steerer
Normandier	July	3 Disabled	Malta	Furnaces					damaged
Nesco	July	23 Collision	Walton Bay	Not stated	Sweden Maru	July	28 Disabled	Havre	Machinery
Nord Africain	July	24 Disabled	Charleston	Pipe burst	Syros	Aug.	1 Disabled	Norfolk	Boilers
					Shawmut	July	27 Disabled	East of Trinity	Broke tail shaft
Old Colony	July	8 Collision	Nixs Mate	Not stated	Schroon	July	29 Fire	At sea	Slight
Oskaloosa	July	8 Disabled	St. Michaels	Turbine	Sachsenwald	July	13 Fire	Hamburg	To cargo
Odell	July	9 Ashore	House Island	Not stated	Springfield	July	23 Disabled	At sea	Lost prop. blade
Osakis	July	11 Disabled	St. Michaels	Prop. lost					
Ozette	July	19 Disabled	Portland	Turbine	Transportation	July	6 Grounded	Portland	Not stated
Onoria	July	8 Fire	At sea	Heavy	Tenally	July	7 Struck pier	Newport News	Slight
Otto Sverdrup	July	30 Disabled	Quebec	Eng. trouble	Thontolite	July	25 Fire	San Francisco	Slight
O. T. Waring	Aug.	1 Grounded	Jacksonville	Undamaged	Tonesit	July	21 Disabled	Copenhagen	Leaking
Pocahontas	July	9 Disabled	Naples	Rudder: fire	Tchad	June	2 Disabled	Matadi	Cylinder
Point Adams	July	8 Disabled	Baltimore	Eng. trouble	Telegraaf I	July	4 Collision	Antwerp	Slight
Putney	July	7 Disabled	Queenstown	Pipe broke	Telegraaf IV	July	4 Collision	Antwerp	Slight
Parthian	July	25 Fire and sank	Oran	Heavy	Tustem	July	27 Grounded in mud	Oakland Creek	Not stated
Pioneer	July	14 Disabled	Galveston	Rudder					
Port Hacking	July	9 Collision	Near Gravesend	Unknown					
Port Said Maru	July	28 Collision	Hampton Roads	Slight					
Port Aima	July	13 Disabled	Cape Town	Lost prop. blade					
Portinglis	July	12 Stranded	Cape Kara	Not stated					
Queen	July	20 Disabled	Point Sur	Not stated	Utah	July	5 Struck mud bank	Boston	Undamaged
Quillwork	Aug.	1 Disabled	Near Halifax	Turbine	Venus	July	5 Struck ground	Paphos	Anchor broken
									Total loss
Ramsey	July	9 Fire	Off Little Point, La.	Unknown	Volunda	July	28 Ashore	Halifax	
Rotterdam	July	13 Collision	Sewall's Point	Not stated	Whiteway	July	5 Collision	Vineyard Sound	Not stated
Roxanna Burton	July	14 Abandoned	At sea	Total loss	Walhallia	July	5 Disabled	Pensacola	Eng. trouble
Ryufuku Maru	July	20 Disabled	Sand Island	Lost anchors	Walden	July	6 Collision	Savannah	Undamaged
Rygia	July	14 Collision	Cape Santa	Damaged	Wichita	July	8 Disabled	St. Michaels	Boil. tube leak
Rupert K	July	31 Lost	At sea	Not stated					
San Cristobal	July	7 Fire	Mobile	Slight	Western Comet	July	8 Ashore	St. Nazaire	Not stated
Socony 5	July	8 Ashore	Bourndale Ferry	Rudder & prop. lost	Western Front	July	11 Fire	Bishops Road	Not stated
Seminole	July	5 Disabled	Off Gibraltar	Eng. trouble	West Imboden	July	14 Disabled	Key West	Mach. disabled
Sutermco	July	10 Ashore	Cape Henry	Not stated	Ward	July	11 Disabled	Norfolk	Boilers
Sydney Maru	July	11 Struck pier	Lamberts Point	Slight	Winston	July	12 Disabled	Norfolk	Ice mach.
Sintram	July	14 Grounded	Long Island	Slight	Winyah	July	9 Engine trouble	Near Guam	Not stated
Stad Zaltbommel	July	25 Collision	Montevideo	Undamaged	West Henshaw	July	26 Aground	Manilla	Not stated
Storm King	July	12 Explosion	Near London	Slight	Winston Salem	July	25 Disabled	St. Michaels	Boilers
Schodack	July	14 Boilers		Not stated	W. A. Ebsen	July	10 Blown ashore	Morgans Point	Not stated
St. Johns County	July	26 Disabled	Fort de France	Machinery	West Totante	July	21 Disabled	Holyhead	Mach. trouble
Selma	July	14 Collision	Galveston	Considerable					
Seirstad	July	23 Struck iceberg	Near St. Johns	Slight	Wieringen	July	2 Collision	Buenos Aires	Bows damaged
Supportco	July	19 Disabled	Key West	Boilers	Wisley	July	4 Collision	Antwerp	Not stated
Stefan Cel Mare	June	23 Collision	Galatz	Not stated	West Haven	July	18 Struck obstacle	Near Baltimore	Damaged prop.
Samara	June	30 Collision	Bordeaux	Slight					
Salazar	June	27 Cargo heated	Montevideo	Bulkhead	Western King	July	6 Disabled	Ponta Delgada	Steerer trouble
Saturn	June	29 Heavy weather	Bergen	Lost deckload	Winyah	July	29 Disabled	Honolulu	Eng. trouble
					Waukau	July	4 Disabled	At sea	Condensers
Stad Amsterdam	July	5 Grounded	Martin Garcia	Not stated	Yosemite	June	27 Disabled	Astoria	Eng. trouble
Stuartstar	June	29 Collision	Channel Bremen	Slight	Yapalaga	July	6 Disabled	Ponta Delgada	Eng. trouble
					Yesoking	July	20 Disabled	Halifax	Boilers

## Assigned Shipping Board Vessels

SCHENECTADY, 7825 tons, assignment division of operations managing caretaker cancelled. Assigned Trostdal, Plant & La Fonta managing agent. Withdraw managing agent Strachan Shipping Co.

ARGUS, 9607 tons, assigned Export Transportation Co., Inc., managing agent. Withdrawn division of operations managing caretaker.

NAMASKET (new steamer) 9632 tons, assigned E. C. Evans & Son managing agent.

WILLIAM PENN, 12,500 tons, assigned Barber Steamship lines managing agent. Withdraw managing agency United American Lines.

JOMAR, 7825 tons, assigned Tampa-Interocean Steamship Co. managing agent. Withdraw managing agency Hasler & Co.

WINONA, 7840 tons, assigned Export Steamship Corp. managing agent.

Withdraw managing agency Hasler & Co.

ALCONA, 5070 tons, assigned Sigsbee, Humphrey & Co. managing agent. Withdraw division of operations managing caretaker.

HAWKEYE STATE, 13,000 tons, upon completion repairs assigned Pacific Steamship Co. for one round voyage Seattle transpacific. Withdraw management operation Matson Navigation Co. Upon completion voyage to be redelivered to Matson Navigation Co. managing agent San Francisco, withdrawing managing agency Pacific Steamship Co.

EASTERN MERCHANT, 12,995 tons, assigned Williams Dimond & Co. managing agent. Withdraw managing agent Pacific Mail Steamship Co.

LAKE FALAMA, 4155 tons, assigned New York & Cuba Mail Steamship Co.

managing agent. Withdraw division of operations managing caretaker.

WEST CUSSETA (new steamer), 8366 tons, assigned Struthers & Dixon managing agent.

LAKE GILTEDGE, 4155 tons, assigned Page & Jones managing agent. Withdraw managing agency Windward Island line.

COLORADO SPRINGS, 9996 tons, assignment division of operations managing caretaker cancelled. Assigned Trostdal, Plant & Lafonta, managing agent. Withdraw managing agency Sudden & Christianson.

MORRISTOWN, 7323 tons, assigned Barber Steamship lines managing agent. Withdraw managing agency United States & Australasia line. Delivery to be effected at Manila.

NASHABA (new), 9632 tons, assigned



McCormick & McPherson managing agent. LAKE FERNANDO, 4155 tons, assigned New York & Cuba Mail Steamship Co. managing agent. Withdraw division of operations managing caretaker.

LAKE FIFE, 4050 tons, assigned New York & Cuba Mail Steamship Co. managing agent. Withdraw division of operations managing caretaker.

LAKE ELMDALE, 4261 tons, assigned Lykes Bros. managing agent. Withdraw managing agency United Steamship Co.

LAKE SAVUS, 4225 tons, assigned Clyde Steamship Co. managing agent. Withdraw division of operations managing caretaker.

WESTLAND, 8800 tons, assigned Lykes Bros., managing agent. Withdraw division of operations managing caretaker.

SCANTIC, 7825 tons, assigned Trosdal, Plant & Lafonta managing agent. Withdraw managing agency J. H. W. Steele Co.

WEST TOTANT, 8649 tons, assigned S. Sgitcovich & Co. managing agent. Withdraw managing agency J. H. W. Steele Co.

EDGEFIELD, 10,041 tons, assigned S. Sgitcovich & Co. managing agent. Withdraw managing agency J. H. W. Steele Co.

COLDBROOK, 7840 tons, assigned Mississippi Shipping Co. managing agent. Withdraw division of operations managing caretaker.

DURANGO, 9985 tons, assigned Columbus Shipping Co. management operation. Withdraw division of operations managing caretaker.

WESTERN HERO, 8571 tons, assigned S. Sgitcovich & Co. managing agent. Withdraw division of operations managing caretaker.

PAWTUCKET, 5204 tons, assigned Daniel Ripley & Co. managing agent. Withdraw division of operations managing caretaker.

FARNAM, 5125 tons, assigned Daniel Ripley & Co., managing agent. Withdraw division of operations managing caretaker.

LAKE FABYAN, 4155 tons, assigned New York & Cuba Mail Steamship Co. managing agent. Withdraw division of operations managing caretaker.

WEST IRA, 8579 tons, assigned Struthers & Dixon managing agent. Withdraw division of operations managing caretaker.

NEWBURGH, 8822 tons, assigned Trosdal, Plant & Lafonta managing agent. Withdraw division of operations managing caretaker.

SEATTLE SPIRIT, 8553 tons, assigned Moore & McCormack managing agent. Withdraw division of operations managing caretaker.

MOUNT EVANS, 8625 tons, assigned S. Sgitcovich & Co., managing agent. Withdraw managing agency Lykes Bros.

CONTINENTAL BRIDGE, 5287 tons, assigned Lykes Bros. managing agent. Withdraw managing agency S. Sgitcovich & Co.

CRANFORD, 9751 tons, assigned Lykes Bros., managing agent. Withdraw division of operations managing caretaker.

BETHLEHEM BRIDGE, 5196 tons, assigned Tampa InterOcean Steamship Co., managing agent. Withdraw division of operations managing caretaker.

WEST HONAKER (New), 8366 tons, assigned Williams Dimond & Co., managing agent.

WEST FAHALON (new), 11,000 tons,

assigned Williams Dimond & Co., managing agent.

DEFIANCE, 11,868 tons, assigned Lykes Bros., managing agent. Withdraw division of operations managing caretaker.

NARCISSUS (new), 9435 tons, assigned McCormick & McPherson, managing agent.

EASTERN QUEEN, 9062 tons, assigned United States & Australasia line, managing agent. Withdraw division of operations managing caretaker.

JANELEW (new), 9415 tons, assigned E. C. Evans & Son, managing agent.

WEST CHETAC, 8554 tons, assigned Tampa InterOcean Steamship Co., managing agent. Withdraw division of operations managing caretaker.

CITY OF BRUNSWICK (new), 9500 tons, assigned Page & Jones, managing agent.

WEST KEENE, 8515 tons, assignment division of operations, managing caretaker cancelled. Assigned North Atlantic & Western Steamship Co., managing agent. Withdraw managing agency Matson Navigation Co.

SUNDANCE, 7840 tons, assigned Tampa InterOcean Steamship Co., managing agent. Withdraw division of operations managing caretaker.

WORCESTER, 8827 tons, assigned C. H. Sprague & Son, managing agent. Withdraw division of operations managing caretaker.

TRIPP, 8558 tons, assignment division of operations managing caretaker cancelled. Assigned Lykes Bros., managing agent. Withdraw managing agent J. H. W. Steele Co.

PEEKSKILL, 8822 tons, assigned Trosdal, Plant & Lafonta, managing agent. Withdraw division of operations managing caretaker.

HEGIRA, 11,600 tons, assignment S. Sgitcovich & Co., managing agent cancelled. Assigned Lykes Bros., managing agent. Withdraw managing agency J. H. W. Steele Co.

PARKSVILLE, 5290 tons, assigned International Freighting Corp., managing agent. Withdraw division of operations managing caretaker.

COULEE, 4125 tons, assigned Lykes Bros., managing agent. Withdraw division of operations managing caretaker.

SAC CITY, 7825 tons, assigned Baltimore Steamship Co., managing agent. Withdraw division of operations managing caretaker.

WESTLAND, 8800 tons, assigned Page & Jones, managing agent. Withdraw division of operations managing caretaker.

PASSAIC BRIDGE, 5180 tons, assigned Waterman Steamship Co., managing agent. Withdraw division of operations managing caretaker.

ASSINIPPI, 2569 tons, assigned Strachan Shipping Co., managing agent. Withdraw division of operations managing caretaker.

COQUIT, 5293 tons, assigned Tampa Ocean Steamship Co. managing agent. Withdraw division of operations managing caretaker.

OSHKOSH, 5940 tons, assigned Moore & McCormack Co., Inc. managing agent. Withdraw division of operations managing caretaker.

LIBERTY GLO, 7825 tons, assigned Daniel Ripley & Co. managing agent. With-

draw division of operations managing caretaker.

LAKE FANNIN, 4155 tons, assigned Clyde Steamship Co. managing agent. Withdraw division of operations managing caretaker.

LAKE GILBOA, 4155 tons, assigned Clyde Steamship Co. managing agent. Withdraw division of operations managing caretaker.

CELESTIAL, (new), 10,000 tons, assigned Williams, Dimond & Co. managing agent.

WEST GREYLOCK (new), 10,000 tons, assigned Williams, Dimond & Co. managing agent.

MAQUAN, 9513 tons, assigned Trosdal, Plant & Lafonta managing agent. Withdraw managing agency Black Diamond Steamship Corp.

## Mexican Line Adds Ships

The Compania Naviera Mexicana, the government-owned and operated steamship line which plies between New Orleans and Mexican ports, has taken larger offices in the Orme building at New Orleans and has increased its fleet to eleven vessels. It is now in charge of Felix Gonzales, representative of the Mexican government, who has arrived in the Louisiana port.

Forecasts of a rate-cutting war between steamship lines on the Gulf of Mexico are drawn from the announcement of this company that freight charges will be reduced as soon as Mr. Gonzales has completed a review of the business conditions of the company. The new offices are directly connected with the offices of M. Elias, consul general of Mexico in New Orleans, and Mr. Elias will have general supervision over the operations of the company.

Trade with Mexican ports, and with other ports on the Gulf of Mexico, has not suffered such a slump as traffic on other sea routes of the world, and the Mexican government line has found so much business that it is in the market for two more 3000-ton steamers to put immediately into service on the gulf. The effort of the company now is to reduce freight rates from New Orleans to Mexican ports, which are the same at present as the rates from New York and other Atlantic coast ports to the same tropical ports.

A freight and passenger service between San Francisco, San Pedro and Mazatlan, Mexico, is to be established by the Mexican Steamship Co., according to Capt. Francisco Miranda, master of the Steamer Mexico, upon a recent visit to Los Angeles. The company has bought the steamers BOLIVAR and WASHINGTON which are now being conditioned for the service.

# Marine News in a Personal Way

Intimate Gossip About What Leaders in the  
Maritime World Are Doing

**S**IR JOSEPH W. ISHERWOOD, Bart., who recently had a baronetcy conferred upon him by King George of England, "on account of distinguished services in naval architecture, specially during the war," is the founder of the "Isherwood" system of shipbuilding. He was born in Hartlepool, England, in 1870 and served his apprenticeship in the drafting room of Messrs. Furness, Withy & Co., Ltd., West Hartlepool. After several years he became associated with Lloyd's Register of Shipping with which he remained for 11 years, mainly in the capacity of a surveyor. During this period he became convinced the then prevailing system of shipbuilding was not ideal from a scientific standpoint and undertook to evolve a system which would provide increased longitudinal strength. The result was the present "Isherwood" system, which was patented in 1906. In 1907 he left Lloyd's to devote his time to the new system. The first vessel built under it was the oil tanker PAUL PAIX of 6600 deadweight tons. Today approximately 1400 vessels of 12,000,000 deadweight tons have been built, are building or are on order. Sir Isherwood is a member of the Institution of Naval Architects, the Northeast Coast Institution of Engineers and Shipbuilders, the Society of Naval Architects and Marine Engineers (New York), the Cleveland Institution of Engineers, and a liveryman of the Worshipful Company of Shipwrights.

CAPT. E. L. MCNOBLE, port captain in charge at Seattle of the foreign services of the Pacific Steamship Co., has been promoted to the position of superintendent of terminals for the same organization. This is a new position and includes supervision of the company's terminals from Anchorage, Alaska, to San Diego, Cal. CAPT. M. F. TARPEY will succeed him as port captain.

ALFRED HOLT, for 25 years general agent at Galveston for the North German Lloyd and other steamship lines, and BEN M. BLOOMFIELD, for 20 years

identified with the shipping industry and recently general agent at Dallas for the Harrison-Leyland line, have organized Holt & Bloomfield to engage in the general steamship agency business in Galveston, Houston, Texas City and Port Arthur, Tex. Mr. Holt will take charge of the New York offices of the company while Mr. Bloomfield will be in charge of the port offices.

W. C. DAWSON, president of the Seattle shipping firm bearing his name, has been elected president of the



SIR JOSEPH W. ISHERWOOD, BART.

Seattle Merchants Exchange for the coming year. Mr. Dawson in past years has filled this position and his selection for a second term is an unusual honor.

CAPT. OMAR J. HUMPHREY, Seattle, has been awarded a silver cup by the British government for his services in transferring 600 passengers from the wrecked British steamer FAZILKA to the shipping board freighter WEST MODUS of which he was commander Oct. 13, 1919. The rescue took place in the Indian ocean.

CHARLES E. HILL, secretary of the Douglas Fir Exploitation & Export Co., has

returned to Seattle after an extended tour through the Orient. Mr. Hill reports an active building campaign under way in Japan and he believes that country will continue to buy heavily of north Pacific lumber during the next year.

D. MURRAY STEWART has resigned after several years as treasurer of the Kerr Steamship Co.

PAUL W. KAUFFMAN, for more than a year and a half with the traffic department of the Black Diamond Steamship Corp., has resigned.

H. B. HOLMES, for the past two and a half years manager of the Philadelphia office of Furness, Withy & Co., Ltd., has been appointed controller of all American and Canadian offices for the company. His position at Philadelphia has been given to JOHN A. TAIT, assistant manager there for several years, and JOHN L. TURNBULL, manager of the eastbound freight department, has been made assistant to Mr. Tait.

WILMER M. WOOD, formerly with the Kerr Steamship Co., has been made general freight agent of the intercoastal service of the United American lines. Mr. Wood has been with the Kerr organization since 1919, having been in both New York and Philadelphia at various times. Before joining the Kerr company, he had been in charge of exports for the United States Cast Iron Pipe Co.

R. L. FRANCIS, in charge of eastbound services between the East and West coasts for the United American lines, effective Sept. 1 takes charge of new offices opened by the company in Philadelphia.

WILLIAM H. COLLINS, assistant superintendent of hull construction of Harlan plant of the Bethlehem Shipbuilding Corp. at Wilmington, Del., has been made superintendent of hull construction and WILLIAM A. QUADE, general foreman of the machine shops, has been appointed superintendent of machinery.

# Activities in the Marine Field

Latest News From Ships and Shipyards

## Harvest To Give Lakes Only Activity

**G**RAIN shipments are expected to give the Great Lakes their greatest shipping activity of the season. Movement of tonnage in other freight has continued exceptionally light and indications are neither the coal nor ore traffic for the remainder of the season will be any heavier than at present. Bidding and chartering of grain tonnage recently was active.

Considerable tonnage had been chartered for grain movement at  $1\frac{1}{2}$  and  $1\frac{3}{4}$  cents and some even had been closed at 2 cents, but many vessel operators have been holding for  $2\frac{1}{4}$  cents and in some instances  $2\frac{1}{2}$  cents. In the middle of August a number of steamers which had been booked in advance were reporting at upper lake ports for their grain cargoes.

Coal shipments in July aggregated only 3,554,686 tons. This was 1,103,623 tons less than was shipped in June when the loadings totaled 4,658,309 tons. As shipments had been getting less and less, it freely was predicted the August coal movement would be even less than that of July.

Receipts of ore at Lake Erie ports in July totaled 2,793,955 tons. A year ago the July unloadings totaled 7,076,357 tons. Up to Aug. 1 this year, the total ore receipts was only 7,249,435 tons—little more than the July total last year—while for the season to Aug. 1, 1920, receipts at Lake Erie ports aggregated 17,407,792 tons.

With most of the blast furnaces of the country down, shipments of ore from docks to furnaces up to Aug. 1 totaled 5,707,232 tons as against 12,579,009 tons a year ago. On the other hand, but further tending to show the season's backwardness, stocks of ore at Lake Erie ports on Aug. 1 were 8,840,824 tons while at that time in 1920, the aggregate was 7,917,109 tons.

Frank W. Wheeler, one of the first shipbuilders in the Saginaw valley and president at one time of the Saginaw Shipbuilding Co., which was organized to build steamers for the government during the war, died Aug. 11 at his home in Saginaw after a several months illness. He was 63 years old. He built the first steel steamer launched in the Saginaw valley. At one time he was a congressman from the Bay City district.

The steamer D. G. KERR was loaded with 14,045 tons of coal in 4 hours and 25 minutes at Conneaut by employees of the Pittsburgh & Conneaut Dock Co., July 30, establishing a new record for the port if not for the Great Lakes. On the same day the E. W. PARGNY was unloaded of 12,417 tons of ore in

3 hours and 22 minutes, best unloading time of the year at Conneaut.

Rebuilding of the steamer ORINOCO at the James Davidson shipyard at Bay City was done at a cost of \$35,000. Numerous changes were made, she was thoroughly overhauled and repaired and her machinery completely gone over.

The piston head in the low pressure cylinder of the steamer H. H. PORTER was cracked recently at Duluth. Permission was given for her to make the down trip for repairs.

Changed from MANCHESTER, the steamer formerly known by that name now is the JOSEPH W. SIMPSON, renamed in honor of the vice president of the Milwaukee Western Fuel Co.

The MARY P. HALL, a tug working the steamer CITY OF HAMILTON which went ashore outside Iroquois Point in the St. Lawrence river, sprung a leak and sank in 15 feet of water.

Due to illness, Capt. A. W. Burrows of the steamer NORMAN B. REAM recently was forced to abandon his command. Capt. J. A. Smith of the O. M. POE was assigned to sail the NORMAN B. REAM and Capt. William Meister was placed in charge of the O. M. POE.

Work at the plant of the Buffalo Drydock Co., Buffalo, is reported to have been only partially interrupted by a strike in July. New men were hired immediately and the crews continued their work.

Capt. Harold Davidson died recently in Bay City. He sailed several ships of the Tomlinson fleet, the last under his command being the steamer HARVEY D. GOULDER. Captain Davidson was the son of James Davidson, veteran vessel builder and owner.

James I. Dawson, steward of the steamer CLIFFORD J. MOLL, was shot and killed in Milwaukee recently, due, it is believed, to his slayer's desperate need for money.

Capt. T. V. O'Connor, appointed a member of the new shipping board, has been succeeded as head of the International Longshoremen's association by Anthony J. Chlopek of Toledo. Mr. Chlopek has been first vice president of the association and was acting pres-

ident after Captain O'Connor's appointment at Washington.

In an address before International Longshoremen's association convention at Buffalo in July, when he formally retired as president, Captain O'Connor bade farewell to his associates and thanked them for the loyalty given him in his 13 years as head of the association. Captain O'Connor was elected honorary president of the association and was given a \$5000 automobile as an appreciation of his services.

John Joyce of Buffalo, secretary of the association for several years, was re-elected and the following vice presidents were chosen: Joseph F. Ryan, New York; M. J. Gahan, Galveston; W. B. Jones, Detroit; Thomas Harrison and T. P. Woodland, New Orleans; G. F. Freitas, Sandusky; J. E. Tigh, St. Johns, N. B.; W. F. Dempsey, Boston; J. W. Milner, Norfolk; Simon P. O'Brien, Buffalo; H. Gildersleeve, Fort Arthur, Tex.; W. L. Pipkins, Paducah, Ky.; and J. A. Madsen, Portland, Oreg. The next convention will be held in Boston.

Fred W. Green of Cleveland and Fred P. Belcher of Winnipeg opened an office as vessel agents in the Kirby building, Cleveland, effective Sept. 1.

The tug AMERICA, recently overhauled at the Cleveland yard of the Great Lakes Towing Co., has returned to her berth at Duluth.

Another reduction in wages became effective on the lakes Aug. 1, the Lake Carriers' association late in July adopting a new schedule of 15 per cent lower. The new rates are as follows:

Chief cooks	Per month
Vessels over 4000 gross tons	\$130
Vessels under 4000 gross tons	115
Boatswains	100
Deck engineers	100
Wheemen-lookouts	85
Deck watch	68
Ordinary seamen	60
Firemen, oilers, watertenders	85
Coal passers	55
Second cooks	70
Porters	55
BARGES	
Mates—larger class	105
Mates—smaller class	85
Able bodied seamen	85
Engineers, where towing machines are carried	105
Cooks	85
Donkey men	85
Ordinary seamen	60

A new channel along the Port Huron water front, St. Clair river, has been completed, according to E. M. Markham, United States engineer at Detroit.

providing two channels from a point about 1700 feet above the mouth of Black river to a point just above the international tunnel. The new channel is 7000 feet long, 400 feet wide and 21 feet deep. Its east bank is marked by two horizontally striped gas buoys, placed at the ends of the cut, with a red spar midway between and the west bank is marked by three black spar buoys directly opposite those marking the east bank. The new or west channel is to be known as the American channel and the old or east channel, the Canadian. All down bound vessels are to navigate the American channel and all upbound vessels the Canadian channel. Vessels under 100 gross tons, and vessels making local stops along these routes, are exempt

from this requirement. The speed of vessels navigating the channels is limited to nine miles an hour.

\* \* \*

The height of the Great Lakes above mean sea level as determined by the United States lake survey for July, in comparison with June, was as follows:

Lakes	Feet above mean sea level	
	June	July
Superior .....	602.43	602.59
Michigan-Huron .....	580.58	580.44
St. Clair .....	575.69	575.62
Erie .....	573.02	572.90
Ontario .....	246.61	246.37

\* \* \*

Capt. Alfred C. Chapman, whose last command was the steamer NORMAN B. FEAM in 1913, died recently at his

home in Lakewood, O., at the age of 79 years. He was one of the oldest masters on the Great Lakes and for a number of years was in charge of the fleet of the Pittsburgh Steamship Co.

\* \* \*

Capt. Charles Anderson, retired lake master, died recently at his home in Cleveland. He was 76 years old. He had been master of several vessels of the M. A. Bradley line, serving with the line for 21 years.

\* \* \*

J. H. Ogle and R. M. Knox, both formerly with the Tomlinson Co., Kirby building, Cleveland, vessel brokers, have opened offices in Cleveland and Duluth to engage in business as vessel brokers.

## Along the Atlantic and Gulf Coasts

THE largest steamship ever to operate regularly out of New Orleans, or any other Gulf port, will be the WILLIAM PENN which was just allocated to the Lykes Bros. Co. and went to New Orleans from New York to make her maiden voyage with a record cargo of grain and flour to German ports. Of 12,375 deadweight tons, she was recently completed for the shipping board at the Pusey & Jones shipyard at Gloucester, N. J. She is motor-driven and when loaded has a draft of 28.4 feet. Shipping board records show that the largest American vessel that entered Gulf ports was the ABRAHAM LINCOLN, 12,980 tons, loaded at New Orleans two years ago.

\* \* \*

A negotiable receipt will be issued in the future for every bale of cotton stored at the public cotton warehouse in New Orleans and bales will be surrendered only upon presentation of these receipts. The dock board made this decision upon ruling of its counsel that Article 323 of the constitution gives the board the right to institute such a system.

\* \* \*

The steamship ALCONA, 5200 deadweight tons, has been assigned by the shipping board to the Tampa-Interocean Steamship Co. for use in the New Orleans-Mediterranean trade.

\* \* \*

The government derrick boat MAXINE for many years in service at Mobile and recently taken to New Orleans, suddenly sank off the Mississippi-Warrior service terminal at the head of Poydras street in 60 feet of water. She is valued at \$30,000 and it is expected she will be raised with little difficulty.

\* \* \*

Beginning Aug. 8, another line will enter the New Orleans-Mexican service. Charles Harrington, agent for the Nervon line of Bilbao, Spain, announces the first sailing will be the steamship MAR DE IRLANDA on Aug. 8 and the second, the steamship MAR CANTABRICO on Aug. 20. Thereafter it is planned

to maintain a fortnightly service between New Orleans and Vera Cruz. Mr. Harrington was a member of the New Orleans trade exposition to Mexico last winter and believes there is need for this additional service.

\* \* \*

The shipping board steamship WESTLAND, which recently was repaired at a New Orleans dry dock, was assigned to Page & Jones, Mobile, and began loading grain at New Orleans late in July, contemplating completing her cargo at Mobile.

\* \* \*

Bids have been received by the dock board at New Orleans for the largest contract for paint made in recent years. A total of 14,700 gallons of black graphite and bituminous paint, lead and oil is required for the locks of the Industrial canal and the Toulouse, First and Robin streets sheds.

\* \* \*

The self-propelled barge MERRIWETHER, of the Southern Transportation Co., New Orleans, which has been in the lock service between New Orleans and points along the Mississippi-Gulf coast for the past several years, sank in Lake Ponchartrain as she was being towed to the shipyard at Mandeville for repairs. The MERRIWETHER was valued at \$10,000 and carried practically no insurance.

\* \* \*

No bid was made for the concrete steamship FAITH, the first concrete vessel to be launched, when she was offered by United States Marshal Loisel at New Orleans. The cost of the vessel is understood to have been \$750,000 to the government, her boilers alone representing an outlay of \$50,000. The vessel was to have been sold in order to satisfy libels.

\* \* \*

With a general cargo of 6000 tons aboard, the steamship EDGEFIELD operated by the Steele interests had a broken propeller repaired at the Jahncke dry dock at New Orleans. She was light-

ened only by draining off her supply of fresh water and fuel oil.

\* \* \*

The dock board of New Orleans carries its own fire liability insurance and finds the system profitable. The fire fund started 10 years ago, now totals \$490,000 after deducting \$120,000 to cover the loss sustained when the Desire street wharf burned last November. The employees' liability fund started three years ago by the Thompson board and maintained by setting aside 4 per cent of the pay roll has grown to the total of \$312,491. This department employs a physician at \$150 a month to attend to employees ill or disabled.

\* \* \*

In spite of the marine strike the net earnings of the dock department of the port commission during May were greater by \$23,593 than the same month a year ago. The gross revenue from all sources for the month totaled \$310,556. From this \$156,413 were paid out in operating expenses and \$51,205 as interest on bonds, leaving a net profit of \$102,937. The cotton warehouse showed a net profit for the month of \$24,342 whereas in May 1920, it lost \$6912. On the other hand the grain elevator this May lost \$4394 as compared with a profit of \$15,323 last year. The total gain, however, of all departments over the previous and all other fiscal years continues, the net profits of all departments from September, 1, 1920 to May 31, 1921 aggregating \$1,165,271 as compared with \$364,987 for the corresponding nine months a year ago.

\* \* \*

Sale of the steamship JOSE TAYA under a federal court order to satisfy libel judgments aggregating \$200,000 was postponed upon petition of the owners, the Messrs. Hijos E Jose Taya Co., Barcelona, Spain, who hoped to raise the necessary money to satisfy these claims and obtain the release of the ship. She is of the modern freight and passenger type and was built in 1919 at a cost of \$1,000,000. The company

is reported to have become embarrassed through the failure of the Bank of Barcelona. Agents of the line feel she will be released.

C. D. Mallory & Co., New York, has established a New Orleans office after having operated in that port through agencies for 20 years. The line has taken over the marine affairs of the Sugar Products Co. of Louisiana and will run seven molasses tankers in the West Indies trade.

The Interstate Wholesale Grocers, Inc., which owns 11 wholesale groceries in Louisiana and Mississippi, announces the establishment of a barge line to be used exclusively in distributing its goods between Thibodaux, Houma, Lockport, Golden Meadow and New Orleans. This marks the first entry of a large Louisiana commercial house into the inland waterways field on its own initiative and with its own money. The F. T. NICHOLLS, a 90-ton capacity steel barge piloted by a gasoline launch, will make the trip each week.

The dock board at New Orleans has voted \$1,000,000 for the extension of rat-proofing work along the wharves of the city. The engineering department has been directed to proceed at once. Considerable sums have already been expended on this character of work along the river front and large

sections of the wharves are flanked by concrete bases.

The marine strike and the continued decline in shipping left approximately 800 union sailors, firemen, cooks and stewards without jobs in New Orleans. Conditions there were not one-third as bad as at New York. Capt. Charles Gugle, a recruiting officer for the shipping board, stated upon his return recently from the East.

The steamship DATCHET which loaded 5000 tons of relief supplies, cleared for the Black Sea port of Batum, republic of Georgia, late in June. The cargo was assembled under supervision of the New Orleans committee of the Near East Relief and included 1250 tons of flour, 750 tons of rice, 1250 tons of hominy and 450 tons of beans collected at New Orleans from various sections of the country and 495 tons of rice and 20 tons of clothing collected at Houston, Tex. Freight charges to the seaboard were borne for the most part by the carriers while the services of the crews were contributed by various labor unions.

At the U. S. marshal's sale of the American iron bark PHYLLIS, at the Winnisimmet shipyard, Chelsea, Mass., recently, the highest bid was that of the Transit Navigation Corp., of \$24,-

500, which will be accepted if the court approves.

The John S. Emery Co. of Boston has purchased from the shipping board the steamer FAIRFIELD.

After being in the service of the American line for practically two years, the shipping board steamer OSAWATOMIE was turned back to the board recently. She will be succeeded by the shipping board steamer AUBURN.

Owing to a substantial reduction in the amount of money allotted by the navy department, as well as depression in shipbuilding, the Fore River plant of the Bethlehem Shipbuilding Corp., Quincy, Mass., has laid off 2500 men, while 2500 others go on part time.

Following approval of the bid received recently at the United States marshal's sale, David W. Simpson, representing the bondholders, has taken over the schooner DAVID COHEN. The name will be changed to VICTORIA S., and the vessel will be open for charter.

Cecil J. Hall has recently been appointed commercial agent of the Maritime Association of Boston.

## Activities Along the Pacific Coast

WITH the settlement of the strike of the marine workers on the Pacific coast, a large fleet of steam lumber carriers has returned to service. They have been idle since May 1. Since then, the cargo mills have been accumulating lumber for shipment to California and in some cases the docks have been so congested that the mills have been compelled to close. Some of the coastwise business has been diverted to the rail lines but the resumption of water service is a relief to the terminal mills.

Improvement in business is reported by the steamer lines operating between north Pacific ports, Great Britain and northern Europe. Some of the companies have full cargoes booked for several months in advance and others have only limited space available. Wheat and flour in parcel shipments are moving in volume while the shipments of canned goods are increasing. Steamers with refrigerator space are having no difficulty in booking large quantities of fresh fruit and fish.

Inauguration of direct passenger service between Puget sound and the Hawaiian islands by the Matson Navigation Co. has stimulated passenger business to the islands. The Alaska Steamship Co., Seattle, has also entered this service and both companies an-

ticipate a steady volume of business. Previously, no direct passenger service has been available from Puget sound ports and the new arrangement is expected to prove popular.

Delays to shipping in Bering sea ports is upsetting schedules and proving costly for the operators. Labor shortage, lack of lighters and bad weather have combined to make the season unprofitable thus far. The steamship KETCHUM spent 21 days in Bering sea waters and had not been discharged and other vessels are encountering similar conditions.

For the purpose of towing Capt. Roald Amundsen's exploration ship MAUD to Seattle for repairs, plans are under way for dispatching a vessel to Nome. Volunteers have been obtained to man the vessel as there are no funds available for wages. The MAUD broke her propeller and will undergo repairs at Seattle. She will remain there during the coming winter and next June Amundsen will continue his ambitious voyage into the Atlantic through the Arctic regions.

Survey of the piling situation at Seattle will engage the attention of the forest service of the department of agriculture during the summer. Ravages of barnacles in Puget sound are extremely costly to owners of docks and piers and the forestry experts are

expected to develop something of interest.

The Nippon Yusen Kaisha, operating between Puget sound and oriental ports, it is announced, has awarded the contract for constructing a palatial passenger and freight liner of 15,000 tons to a Glasgow yard. The liner will be placed on the service out of Seattle and she is expected to be one of the finest vessels plying the Pacific.

Damage estimated at about \$200,000 was caused by fire which on July 11 partially destroyed the terminal properties at Seattle of the East Waterway Dock & Warehouse Co. The shipping board freighter WEST ISON was towed from her berth in time to escape the flames. Lumber, cotton and other cargo was damaged.

Announcement is made that the Compagnie Generale Transatlantique will shortly inaugurate regular service between Europe and Pacific coast ports of both North and South America. R. J. Ringwood, formerly vice president of the Pacific Steamship Co., has been appointed general agent for the Pacific coast.

Capt. John F. Blain, formerly director in the Seattle district of the shipping board, has purchased at marshal's sale the full rigged ship CHILLI-



COTHE. The price was \$25,000. The sailer was formerly the German ship ARNOLDUS VINNEN. She was seized by the government during the war and sold to V. S. Fox, New York. Unpaid claims against the vessel resulted in admiralty proceedings and the final sale. Captain Blain intends to place the vessel in general cargo service.

\* \* \*

Because of an active building boom in Japan, that country has purchased more lumber from north Pacific mills during the first six months of 1921 than during the entire year 1920. Last year Japan bought 77,000,000 feet of lumber in Oregon and Washington and more than 100,000,000 feet will be shipped to Japan this year.

\* \* \*

The St. Helens Ship Co., St. Helens, Oreg., has obtained a contract to build 60 wood pontoons for the engineer department of the army. It also has on hand contracts for several large barges.

\* \* \*

Inauguration of direct steamship service between gulf ports and the north

Pacific is stimulating interchange of trade with a section heretofore untouched by water carriers. Direct bills of lading are furnished to interior points as far up the Mississippi as St. Louis. The steamship Iris recently brought the first shipment of pine fir from New Orleans, this consisting of 100 tons.

\* \* \*

The steamship EFFINGHAM, of the shipping board's European service, is repairing at Portland, Oreg., after striking a rocky shoal in the Columbia river. Steel plates at the bow were damaged for a distance of 18 feet. The vessel was partly loaded and her cargo had to be discharged before she could be lifted.

\* \* \*

During the last fiscal year, 69 more ships from foreign ports entered at Portland, Oreg., than in the preceding 12 months.

\* \* \*

Bound for Seattle to be delivered to her new owners, P. E. Harris & Co., the former Norwegian auxiliary schooner GENERAL PERSHING is a total loss in the Bahamas. The vessel was coming out

from Norfolk with a cargo of coal for the Puget Sound navy yard. The GENERAL PERSHING was built on Puget sound during the war and was bought at marshal's sale.

\* \* \*

The first shipment of vacuum cleaners consigned to the Orient recently left Seattle on the Japanese liner FUSHIMI MARU. Dry milk powder, a new method of preparing milk, is proving popular in the Orient and a shipment of this food was also in the same cargo.

\* \* \*

Officers and crew of the shipping board freighter WEST JESTER will participate in an award of \$26,125 for saving the Japanese steamer KIYU MARU in Yokohama harbor in June, 1920. The salvage claims have just been adjusted by the courts. The KIYU MARU caught fire and while other craft abandoned her, Capt. P. J. Woods and the crew of the WEST JESTER stood by for hours and extinguished the flames. The shipping board settled with the Japanese government for \$96,000. The court awarded Captain Wood an additional share of \$5000 and the chief engineer an extra \$1500.

## Marine Business Statistics Condensed

### Pittsburgh Traffic Gains

River traffic in and around Pittsburgh gained approximately 50,000 tons in June as compared with May, according to the monthly traffic report for the district by the United States engineer. The June total was 1,700,151 tons, made up as follows:

Coal	5,395	999,181	57,275
Coke		17,417	
Gasoline	2,500	1,422	900
Gravel	134,469	81,950	55,257
Sand	149,862	110,569	77,061
Unclassified	292	378	2,400
Packet cargo			3,823
Total	292,518	1,210,917	196,716

### Lake Michigan Receipts

Receipts of ore at Lake Michigan ports for July were 997,678 gross tons as shown in the following record by ports:

Port	Gross tons
South Chicago, Ill.	485,207
East Jordan, Mich.	
Boyne City, Mich.	
Milwaukee	20,654
Indiana Harbor, Ind.	99,585
Gary, Ind.	392,232
Total	997,678

### Soo Canal Report

The total movement of freight through the Soo canal for July was 8,138,583 net tons, an increase of 59,107 tons over the amount carried in June. When compared with the shipments for July of last year, which were 11,577,679 tons, a decrease of

3,439,096 tons is shown. The tonnage comparison figures for the past seven years follow:

	Net tons
July, 1921	8,138,583
July, 1920	11,577,679
July 1919	11,916,152
July, 1918	13,362,344
July, 1917	13,650,047
July, 1916	14,048,494
July, 1915	9,719,237

Of the total freight carried in July, 7,904,693 tons were handled through the United States canal, while 233,890 tons passed through the Canadian canal.

The following tabulation gives the figures in detail for 1921 and 1920:

EASTBOUND		To Aug. 1, 1921	To Aug. 1, 1920
Lumber, M. ft. B. M.		91,487	84,005
Flour, barrels		3,218,250	2,912,681
Wheat, bushels		39,498,805	31,587,201
Grain, bushels		42,048,255	24,123,347
Copper, net tons		8,563	15,707
Iron ore, net tons		10,996,912	24,788,886
Pig iron, net tons		526	95
Stone, net tons		9,135	29,275
General merchandise, net tons		28,186	27,529
Passengers, number		15,729	15,595

WESTBOUND		To Aug. 1, 1921	To Aug. 1, 1920
Coal, soft, net tons		8,076,824	2,842,750
Coal, hard, net tons		1,017,297	783,170
Iron ore, net tons			48,443
Mfgd. iron and steel, net tons		12,578	40,999
Salt, net tons		25,727	44,509
Oil, net tons		215,965	147,402
Stone, net tons		183,866	205,734
General merchandise, net tons		231,744	228,763
Passengers, number		16,456	16,409

SUMMARY		1921	1920
Vessel passages, number		5,767	8,091
Registered tonnage, net		14,155,094	24,872,605
Freight:			
Eastbound, net tons		13,566,252	26,842,147
Westbound, net tons		9,764,001	4,341,770
Total freight, net tons		23,330,253	31,183,917

### July Ore Shipments

Shipments of iron ore from the Lake Superior district during July totaled 4,047,687 tons compared with 9,638,606 tons in the corresponding period of last year, a decrease of 5,590,919 tons. Shipments to Aug. 1 are 10,418,914 tons, a decrease of 15,660,197 tons.

Detailed figures of shipments by ports are:

Port	July, 1921	To Aug. 1, 1921
Escanaba	238,258	449,062
Marquette	80,470	133,414
Ashland	434,088	961,025
Superior	875,005	2,591,235
Duluth	1,731,094	4,639,393
Two Harbors	688,772	1,644,785
Total	4,047,687	10,418,914
1921 decrease	5,590,919	15,660,197

### Lake Erie Receipts

Out of a total of 4,047,687 tons shipped from upper lake ports in July, Lake Erie ports received 2,829,195 tons, as shown by the figures compiled by MARINE REVIEW. The balance on dock Aug. 1 was 8,840,824 tons against 7,917,109 tons on Aug. 1, 1920. Detailed figures are:

Port	Gross tons
Ruffalo and Port Colborne	168,769
Erie	46,982
Conneaut	963,394
Ashtabula	341,299
Fairport	239,423
Cleveland	508,596
Lorain	373,944
Huron	89,368
Toledo	65,507
Detroit	31,913
Total	2,829,195

# Marine Business Statistics Condensed

## Record of Traffic at Principal American Ports for Past Year

**P**ORT traffic in the United States during July was in good volume, comparing the entrances and clearances with the preceding month. Nearly all ports showed an increase in both outgoing and incoming tonnages and in the number of vessels.

Entrances and clearances at the port of New York during July were approximately 10 per cent below what the traffic was a year ago. The slump was noticeable from the month previous. Today the larger ships are making New York and the small vessels are being eliminated.

Traffic through the port of Philadelphia fell to a new low record during July for what has been the normal business of this port since the war. American ships constituted only one third of the total entrances and clearances, whereas previously American ships have been carrying a little better than one half the traffic.

### New Orleans

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	157	371,379	176	410,749
June .....	172	440,527	195	479,495
May .....	166	410,047	145	354,539
April .....	205	515,287	210	530,283
March .....	201	458,079	202	452,385
February .....	178	436,045	200	453,899
January .....	168	399,903	183	443,303
Dec., 1920....	202	520,346	212	507,810
November .....	185	428,650	173	451,553
October .....	181	416,966	228	545,352
September .....	183	453,177	202	506,194
August .....	201	470,168	186	504,741
July .....	191	436,042	213	495,074
June .....	185	402,375	156	370,002

### New York

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	394	1,456,304	403	1,423,109
June .....	408	1,368,334	419	1,425,649
May .....	425	1,454,033	366	1,328,643
April .....	410	1,453,056	438	1,509,353
March .....	455	1,574,526	448	1,539,885
February .....	424	1,407,133	374	1,315,556
January .....	455	1,437,725	414	1,433,564
December, 1920.	516	1,732,485	518	1,802,929
November .....	495	1,741,786	482	1,691,683
October .....	526	1,763,904	514	1,719,103
September .....	506	1,728,266	493	1,574,228
August .....	537	1,634,719	499	1,649,416
July .....	510	1,627,721	462	1,518,406

### Philadelphia

(Including Chester, Wilmington and the whole Philadelphia port district)  
(Exclusive of Domestic)

Month	(Entrances—)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	75	178,925	61	148,674
June .....	71	176,968	74	214,524
May .....	110	295,617	70	178,464
April .....	105	255,249	79	209,854
March .....	102	306,512	87	242,606
February .....	104	285,369	75	221,402
January .....	84	250,233	68	217,281
December, 1920.	116	340,133	112	235,821
November .....	126	338,562	123	350,385
October .....	119	328,074	165	465,800
September .....	144	385,676	153	467,357
August .....	153	377,695	156	438,230
July .....	104	250,104	93	272,913

### Norfolk and Newport News

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
June, 1921....	140	410,926	238	728,458
May .....	129	398,042	201	601,675
April .....	57	179,852	125	375,044
March .....	47	143,487	88	260,053
February .....	55	160,494	108	327,241
January .....	84	251,499	163	442,657
December, 1920.	151	367,936	202	505,690
November .....	155	376,515	244	559,128
October .....	216	509,154	305	722,121
September .....	156	377,717	272	666,466
August .....	137	345,968	275	700,759
July .....	168	410,980	280	725,183
June .....	189	445,371	255	669,083

### Portland, Me.

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
June, 1921....	15	15,723	12	12,749
May .....	4	8,324	10	8,885
April .....	17	54,804	19	64,310
March .....	24	75,529	25	80,107
February .....	20	66,422	21	73,581
January .....	34	93,933	28	86,359
December, 1920.	36	96,281	31	107,567
November .....	37	61,804	16	23,282
October .....	15	22,240	13	19,862
September .....	14	29,993	5	12,661
August .....	31	42,464	14	8,626
July .....	19	27,314	9	9,022
June .....	29	45,670	12	34,886

### Boston

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	98	178,403	81	115,503
June .....	138	211,667	100	119,945
May .....	122	190,148	87	98,008
April .....	101	217,080	71	133,952
March .....	99	306,454	49	118,184
February .....	74	260,502	46	119,847
January .....	72	175,052	50	125,904
December, 1920.	66	178,656	51	128,439
November .....	79	193,433	52	107,112
October .....	82	182,028	62	116,007
September .....	99	210,496	75	123,045
August .....	133	235,706	83	124,643
July .....	111	212,954	87	124,699

### Mobile

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	67	156,801	58	101,850
June .....	53	101,592	51	92,800
May, 1921....	43	67,627	45	71,756
April .....	96	249,996	76	150,776
March .....	79	144,798	56	82,898
February .....	58	105,040	47	89,647
January .....	68	94,273	63	78,109
December, 1920.	97	147,575	74	122,293
November .....	73	91,814	54	74,252
October .....	64	98,107	81	128,540
September .....	55	102,589	60	111,595
August .....	77	118,308	71	127,201
July .....	74	117,421	68	101,845

### Savannah

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
May, 1921....	5	9,507	16	36,377
April .....	17	40,418	12	25,543
March .....	13	19,924	14	29,618
February .....	9	14,493	15	32,475
January .....	11	21,591	20	38,179
December, 1920.	22	45,085	26	36,110
November .....	32	61,216	18	28,108
October .....	21	35,837	31	55,632
September .....	15	43,316	21	46,881
August .....	15	22,562	16	31,695
July .....	16	29,561	14	23,679
June .....	20	41,844	21	39,280
May .....	16	29,270	17	36,425

### San Francisco

Month	(Inclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	275	699,092	335	676,340
June .....	194	474,948	211	543,629
May .....	271	594,409	164	426,255
April .....	377	607,559	452	703,717
March .....	335	645,435	341	611,575
February .....	305	594,636	297	548,103
January .....	356	585,689	330	566,201
December, 1920.	388	606,666	359	561,188
November .....	393	640,474	399	633,274
October .....	431	641,970	421	639,323
September .....	399	549,468	391	566,048
August .....	427	653,372	401	604,069
July .....	393	589,656	411	660,377

### Key West

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
June, 1921....	105	104,326	104	101,494
May .....	100	104,326	104	103,571
April .....	115	117,586	111	114,748
March .....	112	107,736	108	107,083
February .....	124	118,950	120	119,241
January .....	128	146,679	127	142,474
December, 1920.	121	102,611	121	97,733
November .....	103	90,374	98	82,126
October .....	84	92,944	79	80,681
September .....	97	87,017	95	89,030
August .....	98	91,442	102	87,420
July .....	90	83,862	89	83,374
June .....	94	85,776	95	84,583

### Baltimore

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
July, 1921....	116	349,379	123	365,666
June .....	118	359,201	133	413,410
May .....	109	341,731	112	341,381
April .....	114	320,195	119	351,950
March .....	111	320,238	107	316,536
February .....	112	380,602	93	292,881
January .....	131	401,511	112	344,480
December, 1920.	92	264,142	113	329,320
November .....	109	316,743	145	425,493
October .....	134	372,463	188	545,974
September .....	120	353,374	143	409,839
August .....	103	282,370	169	473,160
July .....	140	401,116	155	454,643

### Los Angeles

Month	(Exclusive of Domestic)		(Clearances—)	
	No. ships	Net tonnage	No. ships	Net tonnage
June, 1921....	27	100,411	31	100,580
May .....	35	98,885	26	77,036
April .....	32	119,049	28	71,958
March .....	39	99,455	33	94,380
February .....	74	97,252	60	93,544
January .....	60	111,882	86	64,844
December, 1920.	74	60,333	56	61,211
November .....	69	89,143	79	91,763
October .....	65	72,101	85	104,304
September .....	27	70,989	34	77,330
August .....	20	44,580	34	89,180
July .....	15	40,218	23	62,737
June .....	28	41,275	23	44,289

### Seattle

Month	Deep sea arrivals		Deep sea departures	
	No. ships	Net tonnage	No. ships	Net tonnage
June, 1921....	100	331,505	110	341,278
May .....	106	299,777	99	282,583
April .....	143	339,192	163	370,070
March .....	149	372,824	144	369,568
February .....	103	295,144	101	272,136
January .....	131	312,072	134	344,877
December, 1920.	205	323,744	186	302,051
November .....	256	348,452	228	337,890
October .....	359	347,412	314	366,669
September .....	422	380,582	323	345,535
August .....	438	371,148	393	368,327
July .....	417	441,626	461	444,607
June .....	353	332,666	433	346,849



# Equipment Used Afloat, Ashore

Marine Switchboard—Broken Drills—Bench Drilling Stand

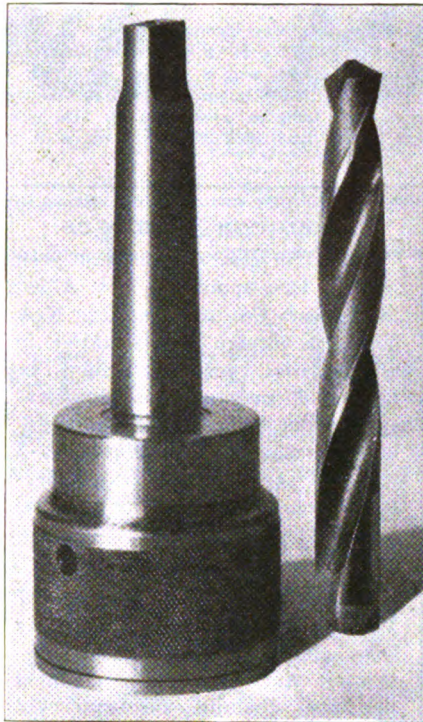
## New Marine Switchboard Designed for Safety

A marine switchboard, which is said to be absolutely safe to operate and offers no danger whatever to the passerby is one of the latest products of the Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. This board has no exposed contacts whatever. One could fall against it without the slightest danger, and in fact even were the attempt deliberately made to reach live parts, it would not be successful unless part of the board were actually dismantled. This high degree of safety is desirable in any kind of service, but especially so on shipboard.

The construction of this board is a radical departure from the standard type. It consists of panels of heavy sheet steel which are finished to resemble slate and are mounted on angle iron supports with cross beams to insure rigidity. Openings



SWITCHBOARD FOR MARINE USE



DESIGNED TO USE BROKEN DRILLS

of the proper sizes are provided in the panels and into these the switches are accurately fitted.

Each switch is contained within a separate compartment and is fully enclosed on all sides. It is operated by means of an insulated handle which projects through the cover. Below the handle is a door which gives access to the fuses and permits their renewal, but this door can not be opened unless the switch is in the off position and all reachable parts are dead. Nor can the switch be closed if the door is open.

These boards are supplied in any desired combination of panels, switches, meters, circuit breakers, rheostats, and other instruments, and in all capacities up to 600 amperes for 250-volt direct current, and 1000 amperes for 600-volt alternating current.

## To Use Broken Drills

The Wayne Tool Mfg. Co., Waynesboro, Pa., has developed a chuck for holding twist drills which have been broken at the shank. The design is simple, the chuck being composed of only seven parts: shank, casing, two pawls, two screws and a casing plate.

The drill is ground to a 60-degree point at the broken end. This allows the drill to center itself automatically

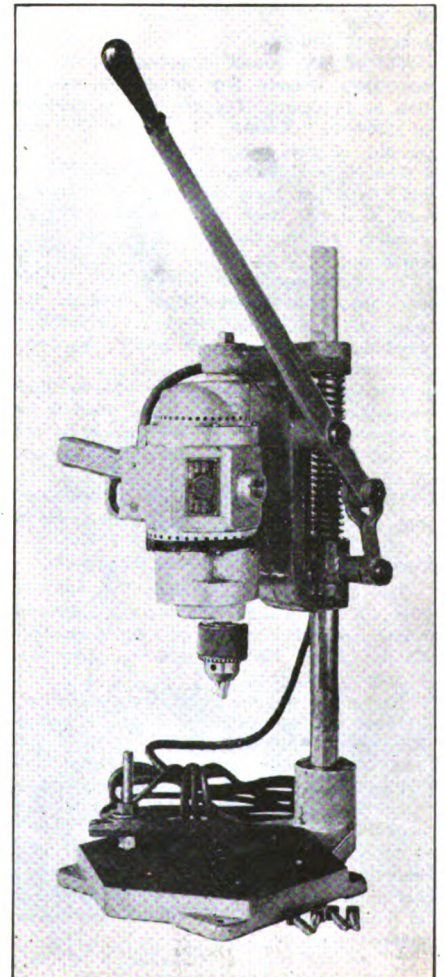
on a 60-degree recess in the shank. On turning the casing the drill is locked in place by the two pawls.

## Bench Drilling Stand

A new bench drilling stand has been developed by the Black & Decker Mfg. Co., for use in adapting electric drills to vertical use.

The bracket carrying the drill can be raised or lowered on the vertical column and is secured in any desired position by means of a split collar and clamping screw. The drill, also, may be swung clear of the base, making it possible to use it for drilling the ends of shafts and other parts of inconvenient length.

An extra long feed-lever gives a ratio of 6 to 1; this means that 100 pounds pressure applied to the handle causes the drill to work at 600 pounds pressure. In the base are six tapped holes to accommodate half-inch studs, used to clamp the work in place.



BENCH DRILLING STAND



# Business News for the Marine Trade

Capitalized at \$150,000 the Frontera Fruit & Steamship Co. recently was incorporated at Wilmington, Del., by C. T. Cobee, C. B. Outten and S. L. Mackey.

The capital stock of the Townsend Repair Works, Richmond, N. Y., recently was increased from \$50,000 to \$200,000.

The Corporation Trust Co. of America, Wilmington, Del., was named as the incorporator of the Munro Steamship Corp., which was recently chartered in Delaware with a capital stock of \$275,000.

The U. S. Corp., Wilmington, Del., has been named as the incorporator of the Harrington Marine Corp., which recently filed articles of incorporation with the Delaware secretary of state. The company is capitalized at \$2,000,000.

The Floating Marine Stores, Brooklyn, N. Y., recently was incorporated with a capital stock of \$100,000, by R. Simon, W. A. Vanness and O. M. Schmulz, 220 Broadway.

The American Marine Paint Co., New York, recently increased its capital stock from \$100,000 to \$250,000.

The Braddock Navigation Co., Ltd., recently was incorporated in Delaware with a capital stock of \$24,000, by Samuel Larosa, Jacob Hayman, Ross Tunick, Port Chester, N. Y., and others.

Capitalized at \$75,000, the H. W. Sweet Shipyard & Machine Works, Greenport, N. Y., recently was incorporated by H. W. Sweet, C. W. Thorn, F. B. Corey and H. S. Fordham, 111 Broadway.

The H. D. Donald Shipping Co., Wilmington, Del., recently filed articles of incorporation in Delaware. The company is capitalized at \$200,000. Franklin L. Mettler is named as one of the incorporators.

The National Radio Electric Corp., Wilmington, Del., has been incorporated in Delaware with a capital stock of \$1,000,000. The Corporation Service Co. was named as the incorporator.

The Tarentum Boiler Works, Inc., Wilmington, Del., recently was incorporated in Delaware with a capital stock of \$75,000, by Fred Scharf, L. A. Scharf and F. V. Cooper, Tarentum, Pa.

The International Marine Life Saving Equipment Corp., Wilmington, Del., recently was incorporated in Delaware with a capital stock of \$520,000, by John E. Ellys, Far Rockaway, N. Y., and Michael Johnell.

The Iroquois Navigation Co., Wilmington, Del., recently was incorporated in Delaware with a capital stock of \$500,000, by H. C. Hand, Samuel B. Howard and Robert K. Thistle.

The Steam Boiler Materials Co., 708 West Sixty-third street, Chicago, with \$15,000 authorized capital, has been incorporated by Charles Allen Miller, Arthur T. Leahy and Charles Claricoates.

The plant of the Super-Heating Boiler & Furnace Co., 306 South McKenzie street, Mt. Vernon, O., recently was damaged by fire. The damage was estimated at \$10,000.

Plans are being prepared by the Thacher Propeller Co., Albany, N. Y., for the erection of a new plant building.

A coal breaker, costing about \$1,000,000 including equipment, will be erected by the Lehigh Coal & Navigation Co., Langford, Pa., to replace the structure which was recently damaged by fire.

C. Francis Masters, Anderson, S. C., is reported planning to establish a welding shop.

The Fletcher Ship Repairing Co., Ltd., Levis,

Que., recently was incorporated with a capital stock of \$500,000, by William J. Bishop, William T. Fletcher and a number of others.

The Interlake Engineering Co., Cuyahoga river and Jefferson avenue bridge, Cleveland, has bought land with 295 feet frontage on the

## Business Changes

**T**HE Universal Crane Co., Elyria, O., has appointed the Allied Machinery Co. of America, New York, as foreign representative in all countries except Canada. The Universal company maintains general offices in the Swetland building, Cleveland. Its product is a 3 to 4-ton portable gasoline or electric locomotive crane for general industrial service.

\* \* \*

Chas. Cory & Son, Inc., 183-187 Varick street, New York, has been made exclusive marine distributor and installation engineer for the Foamite Firefoam Co. The two companies together have developed a number of fire protection systems for boiler rooms in oil burning vessels and for tank protection of fuel oil carrying ships.

\* \* \*

The Oxweld Acetylene Co., Newark, N. J., manufacturer of welding and cutting equipment, has removed the offices of its foreign sales department from Newark to 30 East Forty-second street, New York.

\* \* \*

General offices of the United Fruit Co. at New Orleans, have been removed to the recently completed building of that company at St. Charles and Union streets. The building is 10 stories high.

\* \* \*

Norton, Lilly & Co., steamship agents and brokers, have opened offices in the Continental building, Baltimore and Calvert streets, Baltimore.

river for use in connection with its ship plant.

The new drydock of the Sun Shipbuilding Co., Chester, Pa., recently was placed in operation. The dock has a lifting capacity of 10,000 tons and will take a vessel 500 feet in length.

The Seven Seas Steamship Co., Inc., Wilmington, Del., recently was incorporated with a capital stock of \$390,000.

Capitalized at \$25,000, the Long Branch Steamboat Co., New York, recently was incor-

porated by P. R. Schlessinger, W. Offenberger and W. Foster, 38 Park Row.

The Importers Steamship Corp. has been incorporated at Wilmington, Del., with a capital stock of \$1,000,000.

The Interwaterways Line, Inc., Wilmington, Del., recently was incorporated with a capital stock of \$1,000,000.

The Atlantic Coast Ports Corp., Wilmington, Del., recently was incorporated with \$100,000 capital stock to engage in the wharfage and berthing of ships, etc.

## New Trade Publications

**ELECTRIC TRAMRAILS**—The Cleveland Crane & Engineering Co., Wickliffe, O., is distributing an unusually complete and attractive catalog covering its line of electric tramrails. Their design followed the effort of the company to build up a system flexible enough to reach any point available to a hand or power truck and yet operated on the ceiling. The catalog covers installations in foundries, warehouses, coal handling and painting departments. It discusses both hand and electric carriers, cranes and transfer bridges, attachments and fittings. It also contains pertinent suggestions for using the system as well as directions for installing. This tramrail system handles material up to 2 tons in weight and is designed to reach every corner of a plant, passing from room to room or building to building and up inclines.

**STEEL BARGES**—The Riter-Conley Co., Oliver building, Pittsburgh, is distributing a pamphlet describing its steel river barges designed and built by this company for any class of service, including coal, sand, gravel, oil, etc. The company operates a large fabricating plant, which has proved of value in designing, erecting and launching steel river barges.

**FEED WATER HEATERS**—A new bulletin of the Griscom-Russell Co., 90 West street, New York, describes its line of marine feed water heaters. Complete illustrations are presented to illustrate the different types of heaters as well as the details of construction. Concise information is given on the subject of feed water heating and the computation of savings through the use of such heaters. Instructions for connecting the different types of feed water heaters also are given.

**SMALL TOOLS**—The Greenfield Tap & Die Corp., Greenfield, Mass., is distributing a comprehensive catalog describing the small tools and pipe tools which comprise the greater part of its product. Among other features, the catalog has 70 or more pages of tables and useful information and contains a great deal of interest to the user and designer of tools and machinery. Some of the tables are new. The tools described include screw plates, taps, dies, drills, reamers, milling cutters, bits, arbors, countersinks, hobs, tap and drill kits, mandrels, sleeves, sockets, stocks, tap wrenches, pipe vises and wrenches.

**PACKING**—A catalog presenting its full line of packings, gaskets and pump valves, is a recent publication of the United States Rubber Co. It is fully illustrated, departing from the usual form of such catalogs, and is filled with very definite information regarding each item listed and the specific uses for which it is best fitted. A classified index of the various styles of packings sets forth the various packings recommended for the various conditions of service. The drawings show the details of construction, depicting styles of packing.